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ABSTRACT

This publication covers a number of topics relevant to planning kindergarten programs in the state of Iowa. These are: (1) goals and objectives: (2) developmental characteristics (physical, social/emotional, and intellectual) of kindergarten children and the implications of these characteristics for teachers: (3) aspects of the kindergarten curriculum (the arts, language arts, mathematics, physical education, science and social studies): (4) considerations in the educational environment: (5) health considerations: (6) indicators of children with special needs: (7) educational standards as specified by the Code of Iowa: and (8) program evaluation. (Author/SS)

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Kindergarten... A Year of Beginnings

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"To be what we are and to become what we are capable of becoming. . ."

---Robert Louis Stevenson

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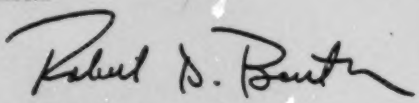
Preface

In this International Year of the Child it is altogether fitting that educators demonstrate Iowa's commitment to children, "their right to learn and to develop individual abilities."*

This is an appropriate time to renew our commitment and to focus on the young child. Let us then provide for all children a kindergarten program of quality—a program which will provide organized, continuous experiences suited to the developmental needs, the maturity levels, and the wide range of abilities of all children.



Robert D. Benton
State Superintendent
Iowa Department of Public Instruction

*Resolution: International Year of the Child

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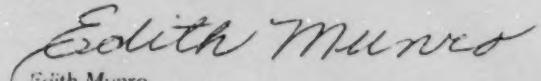
We hope the material presented herein will be of value to educators throughout the state in their work to provide quality kindergarten programs for our children.



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"To be what we are and to become what we are capable of becoming."

---Robert Louis Stevenson

Introduction

Kindergarten goals and objectives should be integrated into a comprehensive curriculum structured to assist the child in cognitive, affective, social and psychomotor development. Previously, kindergarten programs have emphasized such goals as: getting the child ready for first grade, socializing the child, teaching readiness skills. In today's kindergarten, the socializing functions are not neglected, but social activities are balanced with cognitive, affective and psychomotor skills suited to the maturity level and growth pattern of each child. A flexible curriculum differentiates goals, activities and materials to provide for individual differences within the group.

Fresh emphasis is being given to the identification, creation and use of experiences which enlarge children's use of their intellectual abilities, stimulate their thinking, increase their use of language, and develop important basic concepts as a foundation for later learning. The concepts selected are frequently from a content area or an academic discipline and represent basic understandings in the structure of that discipline. If the ideas and experiences children encounter are labeled as 'content', we may then say that current statements on the selection of content represent a major new direction in kindergarten education.

The criticism that formal education is prematurely forced upon young children applies only to those instances where educators ignore how children learn. If these principles are observed, children will not be pushed into learning that which is meaningless for them. Concept development will come through meaningful activities in an atmosphere and environment reflecting the drives and abilities of five-year-olds. The learning experiences will be informal, but not accidental. They will be well-planned, interrelated, and chosen because they move the child toward specific predetermined goals. This changing view is incorporated into the following description of the nature of a modern kindergarten and explored in greater detail later in this handbook.

Goals & Objectives

To use the principles of growth and development as a foundation for teaching and learning.

To provide a planned, comprehensive program of experiences designed to develop the cognitive, affective, social and psychomotor abilities of each child.

To provide a learning environment which facilitates productive thinking, learning and living.

To interrelate the goals and objectives into a comprehensive and coordinated program.

This kindergarten program will consist of objectives and activities specifically designed to help children:

1. Maintain and extend their desire to learn
2. Develop ways of relating to people and knowing themselves in relation to other people
3. Learn to meet new situations with confidence
4. Develop healthy concepts about themselves and their capabilities
5. Increase self discipline, independence and responsibility
6. Learn to meet and solve problems
7. Maintain good health habits
8. Learn skills in coordinating body movements
9. Develop facility with language as both a tool of learning and a means of communication
10. Increase their cognitive learning by using contacts with materials and persons to learn how to find out about the world of things and people, and learning how to learn and to enjoy learning
11. Interact with the environment in such exploratory and manipulative manners as to maintain a creative approach to experience
12. Develop foundational skills needed for further growth in language, quantitative relationships, scientific attitudes, cultural understandings, and other areas of the curriculum.

The degree to which each child will attain these objectives differs according to each child's abilities, background and interests.

Editor's note: This publication was written by a number of authors, each of whom is an expert on the topic he or she discusses. Because of these many contributions, writing styles vary and the format changes to conform and reflect most accurately the material presented. Although the publication is of many parts, it is well unified and integrated to present complete and useful information about kindergarten a year of beginnings.

Characteristics of Kindergarten Children

By:
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In Iowa's kindergartens there are great variations in goals and standards from district to district and school to school. What, then, is the focal point common to all kindergartens? **The focus is on the child!** This focus is outlined in the following descriptions of developmental characteristics. In using this information to plan the kindergarten program, it should be noted that:

Developmental age is a functioning age. Since each child has his or her own built-in rate of development, there is a large range in the developmental ages of a group of children who are chronologically five years old. In addition, one child can function at several developmental levels. Since developmental age is an indication of the child's level of functioning, it is a far better determinant of school readiness than chronological age.

A range of two years in the developmental ages of a group of five-year-olds is normal.

Boys are six months less mature, on the average, than girls at the age of five.

The developmental characteristics include: **physical, social/emotional,** and **intellectual**. The following outline divides children's characteristics into these three categories and couples each characteristic with an implication for the teacher. By careful attention to each child's levels of functioning, a child-centered program can be developed.

I. Physical

Exercise and freedom of movement are necessary to the growth and development of the young child. Children gain control over movement of their newly grown muscles only through practice in using them. The urge to be active is nature's assurance that growth and skill will go hand in hand as the body develops. Provide freedom within control.

Characteristics of the Five Year Old

Child has reached a period of general slowing down in skeletal growth. Girls are usually about a year ahead of boys. Has good general motor control, though small muscles are not as fully developed as large ones.

Alive, eager, noisy and active--but tires easily.
Activity has direction.

Generally has developed hand preference.

Attention span is increasing but has relatively short periods of interest.

Enjoys using all the senses.

Can usually assume responsibility for physical needs.

Implications for the Teacher

Large muscles are well developed. They require continuous strengthening through physical activity and use of appropriate equipment. Provide activities which do not require complicated skills. Using balls, ropes, balance beams, bean bags, painting equipment, rhythm instruments and coloring and cutting are examples of good activities.

Children's activity is not highly social. They like to go from one activity to another and need freedom to test ideas and thoughts with peers in a planned environment. They need planned periods of alternated quiet and active sessions. Make provisions in the program for a cycle of work, play and rest. Change activities frequently during the day.

Arrange seating to accommodate handedness of each child. Do not attempt to change handedness. Make left-handed as well as right-handed scissors available.

Plan group or individual activities for short periods (15-20 minutes). Children will be attentive for longer periods, but should not be required to do so.

Include daily hands-on experiences involving the senses: feeling, tasting, smelling, touching (as well as hearing and seeing).

Always encourage children to assume responsibility for themselves. If the task is difficult, occasional help may be needed. Tasks such as washing, dressing (zip, tie, snap, etc.), toileting, or feeding can usually be handled by the kindergarten age child.

II. Social/Emotional

Leadership from the teacher is essential to assure that all children feel important, that their ideas are recognized, efforts appreciated and mistakes understood. This is only possible when a teacher knows, understands and values each child.

Characteristics of the Five Year Old	Implications for the Teacher
Child is continuing to develop a self-image. Needs praise and assurance that he or she is loved and valued at home and at school.	Always provide positive reinforcement. Seek ways to support the child's self-concept and establish an atmosphere of cooperation rather than competition.
Needs a sense of belonging.	Value individual abilities and interests so that each child feels like a contributing member of the total group. Provide name tags and labels for personal belongings such as lockers, pictures and projects. Include daily opportunities to share personal experiences and show personal objects. Listen to and support children's ideas.
Has a strong emotional link with home and family. The expanding environment of home, school and community is important to the child.	Work and play activities should center around the home. Children imitate adult models. Include parents in an awareness of, and an involvement in, all aspects of their child's school experiences. Send children's work products home to share with parents. Provide extensive communication from school to home.
Is sociable and seeks companionship of other children, but is still rather self-centered.	One of the greatest adjustments for a child to make is to accept and be accepted by other children. Mutual understandings between children must be developed through common interests, special talents and working and playing together. A give-and-take cooperation, in which children share their special talents, is necessary to social growth and progress. Differences in ability are valuable in a cooperative effort.
Has a growing desire for approval and an eagerness to do what is expected.	Help children understand room rules and behavior expectations. Involve children in setting consistent rules and behavior patterns. Help children adjust to group needs and accept the need for respecting authority.
Is usually happy, dependable, interested, cooperative, friendly, sympathetic and helpful	Help children stay this way!
Is developing an ability to distinguish right from wrong, but is eager to gain group approval.	Previously, the children were dependent upon an adult to tell them what to do. They are now developing a "conscience". The teacher will need to provide guidance and reassurance.
Is developing a respect for the rights and feelings of others.	Encourage "asking for" the use of things rather than hitting or snatching. For children, language becomes a valuable tool in learning to express thoughts and feelings, and in learning acceptable ways to handle themselves. Teachers can usually remain in the background while children work through their own problems.
Likes to have things go smoothly. Is interested in immediate and realistic experiences. Still is in "I" stage. May be inconsistent and impulsive.	Give clear and simple directions in advance to get started in the right direction. Allow for extra chances.
Is cooperative, wants supervision; likes to have approval. Blames others for own misdeeds.	Must have a definite routine. Plan and evaluate on the chalkboard daily with the children. Provide many experiences for success.

Characteristics of the Five Year Old	Implications for the Teacher
Enjoys and responds to repetition.	Provide for much repetition in teaching.
Has a feeling of rivalry, sometimes jealous of others. Wants recognition; wants to be first.	Openly discuss these feelings as being normal for everyone. How you handle the situation is the important thing. Plan experiences which allow each child to be the center of attention.
Has a growing sense of humor and appreciation for humorous incidents and situations. Likes to laugh.	Enjoy activities together. The teacher should be able to laugh at him/herself. Help children see and enjoy humor together, but laugh at the activity, not the person.
Is beginning to develop self-control, accept suggestions and initiate actions.	Has some difficulty making decisions. Allow opportunities for the children to make a choice, stay with the choice, and assume responsibility for completing that choice. Provide help and direction as needed.
Is able and eager to assume definite responsibilities with his or her level of maturity.	Children need opportunities to do things for themselves and to develop in their own way. Always encourage a child to try independently first, providing help or assistance when needed.

III. Intellectual

Basically all mental processes are a matter of interaction between the individual and his/her environment. Our learning is dependent upon our five senses--seeing, touching, tasting, hearing, and smelling and the degree to which the centralized nervous system has developed. The more stimulating the environment, the more elaborate and complex a person's mental system can become. Thinking does not happen in a vacuum. Mental processes develop only through experience. As Piaget expressed it, "The more a child has seen and heard, the more he wants to see and hear." An environment rich in motor-sensory experiences encourages a child to want to continue to see, hear and experience more.

Characteristics of the Five Year Old	Implications for the Teacher
Child learns by doing, imitating, observing, exploring, examining, investigating, experimenting and questioning.	Teachers must provide: 1. A wide variety of experiences 2. Freedom to exercise curiosity 3. Opportunity to handle and explore materials 4. Information and descriptions 5. Provocative questions 6. Meaningful explanations
Is curious about the world in which he or she lives. Asks many questions and is eager to learn.	It is difficult for the adult to remember the world through a child's eyes. How do you know that things that buzz can sting, ice melts but a glass doesn't, a brick doesn't look "heavy" or an iron "hot", or that the cow in the picture is much larger than a dog in real life? Through sensory-motor experiences, children acquire facts and develop the skills necessary to store and process these facts perceptually.

Characteristics of the Five Year Old

Begins to show an ability to think through and solve simple problems. (This is a vitally important characteristic that should be continuously encouraged and developed).

Thinks mainly of the present. Has difficulty with time relationships.

Begins to understand the differences between reality and fantasy.

Begins to show a gradual increase in span of interest and attention but is easily disturbed.

Interested in telling stories and relating own experiences.

Improves language by using example and substitution.

Likes to be read to.

Likes poems and the rhythm of language.

Implications for the Teacher

Teachers should encourage and respond to children's questions, provide materials and equipment for children to explore, use community resources, plan activities, seize unplanned opportunities to expand children's awareness, and be sensitive to and build on individual interests and needs.

Relate new information with children's past experiences. As children learn to manipulate objects, they learn to manipulate information: question, test, generalize, discriminate, reorganize and reclassify.

A five year old wants to "do" and "do it now." Waiting seems endless. Daily plan charts help children recognize that the birthday treat comes after work time, story and music. Discuss the sequence of specific events at school and in the child's home routine as well.

Help children identify "real" and "make believe" situations. It is fun to enjoy "make believe" stories but the knowlege that they are not real must be recognized. This is difficult for some children, and patience is required of the adult.

Teachers must observe and assess each child's development. Explore a child's background and use it to capitalize on his or her particular interests. The teacher must time his or her control of the environment in relation to the child's readiness for more stimulation. Each child's learning is facilitated by knowing each child as an individual.

Plan for and respond to children's need to share personal experiences or fantasies. Book reporting, story telling, puppets, flannel board characters and dramatization are all good vehicles for self-expression and language growth.

Through the use of language, a child attaches meaningful labels to objects, persons, situations and relationships. Stimulate children to use language for questioning, exploring, comparing, categorizing, memorizing and expressing feelings, intentions, thoughts and wishes. (Freedom to test one's thoughts and language while experiencing a rich modeling environment of others' thoughts and language will stimulate maximum language growth). Encourage conversation and listen to children. Avoid overemphasis on correct speech which will come later and largely from example.

Read daily! Read stories related to the here and now, stories that answer children's questions, stories that are about other children and families. Always show the pictures and point out things to listen or watch for or questions for which to seek answers. Provide a variety of books, encyclopedias and magazines. Read material pertinent to the children's interests. Share ideas from print in the form of announcements, reminders, plans, etc. Let children experience written language used in functional settings. Help them learn that books supply information as well as arouse the imagination and extend ideas.

Meaningful language and mature concepts develop through experience. Experiment with language, create individual expressions of poetry and rhythm. Record children's language whenever possible. Introduce poetry and identification of sounds--beginning and ending. Make up dances to music and play rhythm instruments.

The Kindergarten Curriculum

Children learn as they encounter new experiences and respond to these experiences. In order to move the child toward specific and predetermined goals, experiences need to be selected carefully. The teacher must consider:

- the child and how learning occurs
- the maturity, abilities, and potentialities of each child
- the skills and knowledge the child needs
- the environment in which the child functions
- the relationship among the child, the environment, and the predetermined goals

The following section presents the content areas individually for clarity and understanding. However, these academic areas are not designed to be taught separately, but are to be interrelated and integrated.

The Kindergarten Curriculum

Draws content from:

1. Art
2. Health and safety
3. Language arts
4. Mathematics--spatial and numerical relationships
5. Music
6. Science
7. Social studies-local, neighborhood and community
8. Life-space of child

Provides children opportunity for:

1. Developing creativity and initiative
2. Discovering
3. Expanding the social self
4. Exploring
5. Listening
6. Manipulating
7. Meeting with success
8. Observing
9. Reading their environment
10. Sharing
11. Speaking and communicating
12. Trusting self and others

Out of which grows the child's:

1. Knowledge
   - A. Concept formation
   - B. Generalizations
   - C. Understandings

2. Personal Development:
   - A. Attitudes and appreciations
   - B. Concept of self
   - C. Self expression
   - D. Skills & abilities
   - E. Values

Reprinted from *Kindergarten Guide for Arizona Schools*, State of Arizona, 1971.

The Arts

By:

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The Des Moines Kindergarten Committee

Visual Arts

The art program is concerned with visual perception and visual expression. Art experiences in kindergarten help the child gain increased awareness toward self and the environment, both natural and man-made. Giving children time and opportunity to discover and enjoy beauty for themselves should be an essential part of each school day. The responsibility of the teacher is to provide an ever-widening art experience which opens the door into the world of color, texture, line, shape and form.

The teaching environment and procedures need to provide for the characteristics of the kindergarten age child such as, curiosity, imagination, and ingenuity.

Art is not subject matter to be learned. Satisfaction comes to the child during the process of making the product rather than in the finished product. Art experiences should **not** include:

- Assembling teacher-prepared materials
- Coloring books
- Tracing patterns
- Ditto sheets
- Equal product expectation for each student

A successful art program consists of many varied experiences to be incorporated by the individual child as development and capacity permit.

The skills in the art program can be divided roughly into two groups: visual and motor.

*__The visual skills are__ those which help the child to mentally organize and understand what he/she sees. These include: seeing shades of colors, pattern, sequence or order of repeat, stripes, overlapping shapes, kinds of lines, background and foreground of a picture, skyline, balance, symmetry and spatial concepts such as over, under, top, bottom, sides, back, front, high, low, up and down.

*_Early Childhood Handbook_, Des Moines Independent Community School District, 1977.

Motor skills include:

- Using scissors to cut paper, string, and cloth. Demonstrate how to hold, opening and closing blades.
- Cutting paper in lines or strips, then doing something with the strips.
- Cutting paper in circles or curves - how to hold the paper and scissors and turn the paper in the scissors.
- Cutting a hole in paper and how to cut shapes and patterns.
- Gluing paper, string, cardboard, and tissue paper, using finger or brush to apply paste.
- Single and multiple folding of paper for cutting.
- Modeling clay forms: pulling, pinching and joining parts.
- Painting- holding the brush, dipping it, wiping it, moving it, washing it, and mixing colors.
- Weaving: over, under and reversing.
- Print: rolling ink, pressing impression and repeating motif.
- Other:
  - Making lines with rulers
  - Coloring with crayons - drawing and coloring shapes.

The classroom and storage

The physical arrangement for any art activity should allow for enough space for each child to work comfortably. If a classroom is too small for all students to participate in an art experience which requires a large amount of space, then two activities should occur simultaneously, one requiring a small space for some of the class and one requiring a large space for the rest of the class.

The teacher should select the materials from the storage area which are to be used for the day. Materials should be arranged so that they are convenient for the student's use.

Space is needed for drying wet art work, storing unfinished art work and displaying finished art work. A storage cupboard with adjustable shelves (8" deep) is necessary for small items and other shelves (18" deep) is needed for larger items.

A sink or a stand for pails of water is needed to help with clean up.

Sample Objectives	Teaching Implications
1. Children will participate in art activities that promote creative expression.	Offer experiences in manipulating and experimenting with paint, chalk, colored paper, finger paint, etc. Cut and tear paper to make forms and designs. Manipulate clay to form 3-dimensional objects. Use left-over materials for designs, picture-making or collage activities. Read poetry to children for them to illustrate. Experiment with designs and shapes.
2. Children will participate in art activities that are fun.	Encourage art work that is "just for fun". Experiment freely with mixing colors. Use crayons or chalk to produce varying effects. Paint or draw to music.
3. Children will have access to and use a variety of art materials.	Provide many art materials: tempera paint, plasticene finger paint, large crayons, scissors, paper, clay, paste, chalk, charcoal, string, sand, soap, materials of different textures, sandpaper, simple construction tools, other. Organize materials for children's easy access. Provide activities in which children learn what they can and cannot do with materials.
4. Children will develop an awareness of and appreciation for art and beauty in the environment, natural and man-made.	Provide opportunities to develop sensitivity and awareness through seeing beauty found in pictures, specific objects, and nature. Share and display that which is beautiful - leaves, flowers, stones, pictures, hats, clothes. Plan short walks to look for beauty. Provide investigative activities for children to learn about their natural world: leaves, insects, snow, clouds, etc. Take children to an art gallery or museum. Display reproductions of various styles and periods of art work. Encourage children to talk about them freely so that children understand there are differences in how people respond.
5. Children will develop a sense of color, texture, form, and space relationships.	Provide many awareness activities in color, texture, form and space relationships. Relate activities to children's own background and environment. Provide sufficient time and space for hands-on experiences: touching, measuring, comparing, etc. Provide a touch and feel table or box. Provide materials for texture rubbings: leaves, burlap, windowscreen, shapes. Discuss mobiles; then teach children to make them.
6. Children will increase their feelings of self-worth.	Develop a teaching atmosphere free from criticism or strict control. Encourage children to talk about their art work. Teach children how to use tools and care for material properly. Delegate the responsibility for care to children. Provide activities that require choices. Exhibit all children's work, not just the "best" examples.
7. Children will use art activities in many curriculum areas.	Include activities that relate the name of colors and to the colors observed. Have children tell stories about their art work. Organize children to cooperate in a mural to supplement social studies. Use art experiences to reinforce concepts of up-down, light-dark, high-low, middle, right-left. Recognize shapes as an activity. Children make simple puppets to use in stories. Use new vocabulary developed in art.

Music

Music combines rhythm, melody, harmony, tone, color and form. Music functions as a natural, spontaneous activity in the lives of young children. It is a way for children to creatively express their ideas, experiences or moods.

Music for the young child should consist of a variety of experiences with sound and movement and include: singing, listening, creative movement, rhythms and dramatization. A child-centered program should produce pleasure and enjoyment rather than musical perfection.

Musical experiences create a happy, successful day for the kindergarten school child. Not only is music fun, but it increases language skills, broadens vocabulary, and develops an awareness of and response to rhythm. The music period should include correlation with work time activities.

The following materials and instruments can be particularly useful in the kindergarten classroom and will be helpful in achieving the objectives outlined in this section:

- A variety of written music
- A piano is recommended. Over-dependence on the piano should be avoided, however
- A variety of records and tapes
- Record player (s)
- Tape recorders
- Rhythm instruments: bells, triangles, sticks, cymbals, tambourines, maracas, sand blocks, tuned bells, resonator bells

Sample Objectives	Teaching Implications
1. Children will sing alone and individually	Teach a song by rote. Select short songs with narrow melodic range. Include action songs with gestures. Encourage spontaneous singing. Use tone matching often. Create melodies with children; encourage individual melodic creations. Use songs with individual response.
2. Children listen responsively and for enjoyment	Stimulate or calm the class with music. Give children something definite for which to listen: Peter in "Peter and the Wolf," a giant walking, melodies which are repeated, etc. Allow children to draw to music. Provide rhythmic activities to music: clap to music, echo clapping, keep time with rhythm sticks. Teach children to identify in music: high-low, simple tone progression, loud-soft, pauses. Encourage children to tell stories about music.
3. Children will understand music concepts of high/low, loud/soft, fast/slow	
A. High/low concept	Bounce rubber balls; make voices follow the pattern of the up and down bouncing of the ball. Draw mountains and valleys; trace with fingers and then sing the mountains and valleys. Talk in a giant voice, body close to the floor (low); talk in a midget voice on tiptoe (high). Be a make-believe animal (big/low); be a make-believe animal (small/high).
B. Loud/soft concept	Be a make-believe animal (loud/soft). Every member of class sing together; then, one member of class sings alone (discover which is louder? softer?) Play a big drum (bass); play a hand drum; discover which is louder, softer. Use body percussion--toe-tapping, leg pat, hand clap, finger snap; discover which is louder and which is softer. Sing a baby to sleep. Wake up a giant. Be an echo; call your friend a block away.
C. Fast/slow concept	Use rhythm sticks with a big beat (slow); small beat (fast) Step a small beat (fast); a big beat (slow). Use voice or instrument to climb a ladder in slow motion. Save someone from a fire by coming down the ladder in a hurry. Use voice or instrument to walk to the door in five giant steps; repeat in 10 dwarf steps. Use voice or instrument to be a mouse running from a cat; be an elephant in a parade.

Sample Objectives	Teaching Implications
4. Move creatively to music and rhythm	Encourage children to move freely to music. Provide activities in which children respond to music with fundamental movements such as: walking, running, skipping, sliding. Provide activities in which children interpret music through body movements while they assume various roles such as: skater, soldier, leaf, snowflake, robot, various animals.
5. Dramatize music such as "Little Duck," "Noah's Ark," "Balloons" (Dance-a-Stories)	Encourage children to dramatize music. Talk about character(s) in songs; have children act out a character.
6. Explore and create with rhythm instruments	Provide a variety of rhythm instruments; teach children how to use them; encourage children to use them individually and in groups. Encourage children to accompany songs or to create tunes. Compose a weather story--decide which instrument will be sun, rain, wind, lightning, rainbow, thunder.

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Language Arts

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Language arts is a comprehensive term which includes the skills children need: 1) to communicate and to share their ideas and feelings with others and 2) to understand the thoughts and feelings of others through both spoken and written forms. These skills are commonly referred to as listening, speaking, writing and reading.

As children grow from infants through the kindergarten year, they develop a number of skills basic to successful communication. They develop a background of experiences, acquire vocabulary, refine concepts, and develop auditory and visual perceptions. Children develop these skills at their own pace and so enter kindergarten with varied abilities, experimental backgrounds, and interests. Some children will already be reading, some will have knowledge of letter names and/or sounds, while still others will have difficulty expressing complete thoughts or naming colors. Every kindergarten child is unique and responds to listening, oral discussions, writing, and reading in his or her own way. Each child needs to be shown by example throughout the year how each of the communication skills is important to him or her. Therefore, teachers must implement language arts programs based on a real consideration of children's individual strengths and needs rather than try to mold children to a fixed language arts curriculum. The activities should be diverse enough to provide for each child's stage of development.

Language, Vocabulary and Concept Development

Proficiency in oral language is basic for children to achieve competence in reading. While five-year-old children have acquired a substantial use of language during the pre-school years, their language growth is by no means complete. The typical five year old uses 2,000-3,000 words in speaking and understands approximately 5,000. However, while children may know the name of something and may be able to identify it, their concepts may be vague or inadequate. When children have the opportunity to hear interesting models of language in books, films, and first-hand experiences, and then have opportunities to talk about these experiences, their language and concept development expands. The more fluent children are in oral vocabulary, the greater their resources are for associating meaning with printed words.

Sample Objectives

1. Children will use new words while talking during classroom activities.

2A. Children will begin to demonstrate an understanding of relational terms such as before/after and next to/inside.

Selected Activities

Story Books
Read to children each day. Encourage children to talk about the story and the pictures. These conversations provide children the opportunity to talk about things of interest and to expose them to mature language from a teacher as well as from a book.

Creative Dramatics
After a story has been read, children can act it out. Before acting it out, they should discuss what the characters are like, how the characters should sound, and how they should behave so that the story comes alive.

Flannelboard Stories
Tell flannelboard stories. After children have heard a flannelboard story, they can use the flannel cut outs as they retell the story to themselves or others.

Puppetry
Introduce puppets by name. As the puppet speaks and asks questions, the children will respond to the puppet as if it were a real person. The teacher should also talk with the puppet. Leave puppets on a shelf where they are available to children for their independent dramatic play.
Let children make simple stick puppets. They can draw a face, cut it out and have it stapled to a tongue depressor. As the children complete their puppets, they can tell a puppet story.

2B. Children will develop more complete and accurate concepts.

Mystery Box
Put an assortment of objects in a box. The children reach in, feel one object, and describe it to other children or the teachers. Teachers can supply descriptive words to help children. For example, ask, "Is it fuzzy, or smooth?" "Is it stiff or does it bend?" In this way children learn new words and develop more accurate concepts.

Cooking
When children cook, use technical terms asking them to describe cooking processes. They will learn such words as "mix," "beat" "knead," and "chop".

Building Blocks
As children play with blocks, they will talk with each other about what should be built, and how they should go about building it. This provides excellent opportunities for children to organize and express their ideas and feelings.

Conversation Notebook
Write the children's comments in a large discussion notebook. Let the children know their comments are being written in a notebook "so we can keep our ideas together and we won't forget them. We can go back over them when we need to."

Discussion or Evaluation Time
Children describe to the whole group how they made something or what they found out about something during an activity earlier in the day.
It is important to avoid making these presentations routine or boring. This need not be done every day or even every week. When children have mastered a process or have learned something of interest which they would like to share, then it is appropriate to encourage them to tell the group.

Listening

Listening is more than the ability to hear. In developing listening skills we are talking about helping children develop the ability to choose selectively the sounds to which they will pay attention. Listening skills can be learned; therefore, teachers must help children learn to listen to those things which they think are worth listening to, at the level required for understanding.

Sample Objectives

1. Children will listen to a variety of sounds.

2. The children will follow directions given orally.

Selected Activities

Interesting Sounds
To help children develop sensitivity to sounds, take them on a walk around the school or block. The teacher may ask children to listen for noisy sounds, quiet sounds, or specific sounds such as cars or birds.
Guide children by asking, "Can you identify the sound?" "Was it nearby or far away?" "Was it high or low?"

Do as I Do
One child beats a drum or box a specific number of times outside the other children's view. The other children then clap or tap the same number. Begin with simple beats, progressing to more complex patterns such as one fast and two slow beats. Loudness of beats can also be varied.

Teacher or leader gives two or three consecutive directions to a specific child. If child does them in the correct order, he or she becomes the leader.
Teacher should look for opportunities throughout the day to give a series of directions and note ways in which children follow them.

Writing

Many children's interest in reading begins with writing. While there is an inseparable bond between oral and written language, written language is more than talk written down. Recording the experiences that occur within the classroom is the most beneficial way for children to associate what they do and think with printed language.

Five year olds are interested in writing. They often ask adults to "write" a word for them. At this stage children will probably reverse letters. This is to be expected. As children develop, most of them will make the letter correctly by the age of seven.

Sample Objectives

1. Children will dictate a sentence describing a picture they have drawn.
2. Children, as a group, will dictate a story.
3. Children will "write" signs and labels.
4. Children will write some lower and upper case letters.

Selected Activities

Story Writing
Children can create stories about pictures they have drawn. Record a story for each child periodically. The writing should be done on a separate piece of paper so that it can be attached to a picture. Writing in spaces on a picture often spoils its appearance.

Group Experiences Stories
Experience stories can be based on room pets, science experiments, field trips, and funny happenings in the room that interest the children. Children benefit from thinking about characters and sequence of events before they write. Spend time talking about what happened, the sequence of events and how the children felt. The quality of a story depends on the discussion and the flow of ideas prior to writing the story.

Real Writing
As the occasion arises children can dictate labels to help keep the room in order. Labels should always be written in complete sentences. For example, instead of the word "door" write: "This is a door" or "The door is brown."

Magic Slates
Make magic slates available in writing centers so children can use them. Because slates are somewhat fragile under hard use, they might be used for writing letters only.

Letter Guides
Ditto papers with letters outlined in dots. It is helpful to put an arrow where children are to begin.

Writing Over and Under
Encourage children to write over your writing. Children are usually more interested if the original is in pencil, and they write over it in a colored magic marker.

Reading

Reading is more than recognizing letters and discriminating among them; it's more than knowing the letter-sound relationships, and it's more than answering questions about a story. Reading is responding to print anywhere it's encountered: in a book, magazine, TV commercial, or labels on commercial products. To be able to respond to print, children must value reading and have an interest in it. They should have an understanding of the meanings of words; they should be able to see the relationship among ideas; and they should be able to read the words.

Prereading is the stage of reading development which precedes formal instruction to reading. It is the base upon which future successes and attitudes are built. Readiness for reading comes from a base of past experiences, maturation, and training. A sharp dividing line between prereading and beginning reading should not exist, but rather there should be a gradual transition from one level to the next.

The growing number of highly structured reading programs for kindergarten children is of concern. At this age children should not be placed in a group which always remains together for reading instruction. Kindergarten teachers need to provide reading experiences as an integrated part of a broader communication process that includes listening, speaking and writing. However, this broader view of readiness does not obscure the need for carefully focused instruction on specific skills needed for successful beginning reading. The purpose of this section is to identify selected skills and possible activities toward developing these skills.

Recognizing the Function of Reading

Sample Objectives

1. Children will learn to value reading as a source of information.

2. Children will value reading for its pleasure.

Selected Activities

Sharing Information
Share with children interesting information which you have acquired from a book, newspaper or magazine. Your example is essential in helping children care about learning to read.

Cooking
Write out the recipe for food being prepared even if it only has two or three simple steps. As the food is being prepared, read each step.

Reading Directions
Instead of telling children directions for a game or other activity say, "Let's read the directions. They explain what to do."

Reading to Children
Read good literature to children each day. Be sure to include poetry as well as stories.

Book Cover
Give children many opportunities throughout the day to explore and "read" books independently.

S.S.R. - Sustained Silent Reading
Schedule times regularly for the entire class to "read" books of their choosing.

Library
Make arrangements for children to use the library as needed in addition to the regularly scheduled library period.

Pretend Reading
Provide many opportunities for children to be readers. Children can read picture books to friends. They can also "read" a story which they have heard many times.

Experience Stories
The first reading of an experience story should be done by the teacher. Emphasize the left-to-right progression while reading the story. Ask the group to read the story with you. A few children may volunteer to read the story orally.
On the second day the group reads the story with the teacher, and then some children read it individually with as much help from the teacher as is needed.
Three or four days is the maximum amount of time to spend on one story. It is preferable to write and read many stories than to over drill on one.
Duplicate stories to put in a class book for further reading and activities.

Visual Discrimination and Visual Memory

Visual discrimination among letters and words is required in learning to read.
Visual memory requires the ability to retain the visual image of a form.

Sample Objectives

1. Children will match words, letters and phrases with the example shown.

2. Children will visually recall a letter or word after the example has been removed.

Selected Activities

Matching Words in Language Experience Stories
When writing a story children have dictated, leave a space under each line. Write words, letters or phrases on cards and let children find the word, letter, or phrase in the story that matches the card.

When working with a story in which sentences begin with the same word, ask children what they notice. Children do not have to be able to read words to note similarities and differences among words.

Put a story and an envelope of words or letters in a folder in the reading corner which can be used for independent practice in word or letter discrimination.

Have multiple sets of letters and words. Each child in a small group should have a set of letters or words. Show the children a letter or word. Let a child point out important features of the letter or word to remember. Remove the cards and let the children find the letter or word in their set of cards.

Letter Names

In reading programs much attention is given to teaching letter names. While this should be part of the program, it cannot be assumed that direct instruction in letter names will improve achievement in beginning reading. Children should grasp the concept that words are made up of letters and should associate letter forms with letter names.

Sample Objectives

1. Children will associate letter forms with letter names.

Selected Activities

ABC Books
Read ABC books of children's literature such as *Bruno Munari's ABC* or *Zoophabet* to promote interest in letters.

Letters in My Name
Have magnetic letters and magnetic board of felt letters and felt board, or paper letters available. As children find the letters for their names, help them say the letter names.

Letter Cards
Each child should have an individual set of upper case and lower case letters to be used in matching activities. Teacher should point to a word on a label around the room, or on a chart story, or to a child's name and ask children to hold up the letter they see at the beginning of the name or word.
When introducing a new book or talking about an activity in the room, write a word on the board. Later come back to the word. Tell the children the name of the letter with which the word begins and have children locate the word in their cards.

Alpha Bits
Project Alpha Bits dry cereal letters on the overhead projector and let children give the names of the letters.

Typewriting
Have an old typewriter and paper available to the children. After the child has typed some letters, tell him/her the names of the letters typed.

Auditory Discrimination

Five year old children can discriminate between most sounds and words. This is demonstrated by their ability to talk. However, discrimination of similarity and differences of beginning sounds is difficult for children of kindergarten age level. It is not that children cannot distinguish between **hat** and **pat** in the flow of speech, but that the initial sounds are not obvious. Children often need to be taught for what they are to listen. It is easier for them to listen to larger parts of words and gradually learn to listen for similarity and differences of single sounds.

Sample Objectives

1. Children will identify rhyming words.
2. Children will give sets of rhyming words.
3. Children will identify words with identical initial sounds (alliteration)
4. Children will give words that begin with the same initial sound.

Selected Activities

Introduce rhyming with an instruction such as, "Listen to this word: money." Say the word very slowly. "I'm going to say words that rhyme with money. Here I go: sunny, funny, bunny. Listen, they all rhyme: money, funny, bunny, sunny. If I ask you for a word that rhymes with money, you can say sunny or you can say what _____?" (child's name)

Play a game in which you, the teacher, say the first part of the word and the children complete the word. Say, "We're going to play a rhyming game. I want words that rhyme with money. I go first. Then you say *ne*."

Fun____
Sun____

Start rhyming exercises with words of more than one syllable. One syllable words are more difficult for the beginner because the part that rhymes is small. When children become proficient in rhyming long words, introduce short words.

Collect a set of pictures such as a girl, cake, book, tree, man. Have a child select a picture. At first, the teacher gives two rhyming words for the picture selected by a child. Ex.: the picture of a cake is chosen. The teacher responds with *make* and *bake*. Children then start giving rhyming words for the pictures selected.

Present alliteration as making up words that *start the same way*. Begin with entire syllables (there's more to listen to) and gradually decrease the length of cue until children are able to say a word with a single sound. Say, "Listen I'm going to say some words that begin the same way as *ice-cream*. Here I go: *ice-cube, ice-ing, ice-icle*". Have the children repeat the words that start the same way.

After children can give examples of words that begin with the same initial syllable, begin using words in which the initial consonant and vowel (long) are the same. Ex.: paste, paint
make, main

When children can do step 2, move to short words in which only the initial consonant is used.

Letter Sound Box

Start with one box such as an "s" box. Have the children bring from home small objects that begin with "s." The objects are dumped out of the box, examined, and put back.

As other boxes are made, dump the contents of two or more boxes together and have children sort them.

Chants

Compose chants with children.

Examples:

Cute cats can kick
Silver snails snap
Many monkeys munch munchers

Letter-Sound Association

Sample Objectives

1. Children will associate initial sounds with the correct letters.

Selected Activities

Picture Collections
Children collect pictures, objects or words for a particular sound.

Chants
Compose chants that begin with a particular sound.

Picture Spin
Make (1) a cardboard spinner board marked with four consonants and (2) picture cards of items whose names begin with sounds for consonants shown on the spinner board.
Two or three children may play. Place picture cards face down in the deck. Children spin, pick up a card, and say the picture name. If the picture name begins with the sound represented by the letter spun, the child keeps the picture. If it does not, it must be placed on the bottom of the deck. The child with the most picture cards when the deck is gone wins.

Sight Vocabulary

Sample Objectives

1. Children will begin to recognize words.

Selected Activities

Experience Story
After children have been working with an experience story, they should be given a duplicated copy and asked to underline any word they know.

Making Statements
Cut tagboard 2" high and of various lengths. Write parts of sentences such as, "I like . . .," "My name is . . .," "Today is . . .,". On shorter cards write individual words that can be used to complete the sentences.

Patterned Stories
Use patterned stories, such as the book, *I Like*. After you have read the book to the children, write on the board.

I like_____
I like_____
But, I don't like_____

Let a child tell two things he/she likes and one thing he/she doesn't like. Then let the whole class read the lines. Have another child complete the blanks and let all the children read the lines.
After all of the children have had the opportunity of telling what they like and don't like, categorize the words according to food, toys, interests.

Our Likes

Food	Toys	Pets
cake (4)	bike (6)	dogs (5)
pizza (3)	basketball (2)	cats (3)
candy (2)		horse (1)

Word Banks
As children begin to read words, they can start a word bank. An individual word bank is a personal vocabulary file kept by each child. A word is put into the file only after it has been used in oral or written sentences and the child can read it. These words can be used in matching and classifying activities.

Comprehension

Reading comprehension starts before children can read. Their understanding of the stories they have heard can be observed through their facial expressions, retelling of the story, class discussion, art and drama. Questions should be used only as needed to help children sort out information about important characters and story action.

Sample Objectives

1. Children will read pictures to determine the story action and the sequence of events.

2. Children will recall the sequence of events or episodes of a story and "act them out."

Selected Activities

Wordless Picture Books
Let children record a story for a wordless picture book. Type the story from the recorder using a primary typewriter. Cut the story apart according to the ideas that match each page. Paper clip the story to each page. Later paste the sentences for each picture on a separate sheet of paper. Staple the book together and let the child illustrate the book.

Pictures
Cut up books of fairy tales and have the pictures laminated. Ask the children to put them into sequence and then tell the story.

Camera Fun
Take a series of Polaroid pictures of a field trip or a science or cooking project. Have the children put the pictures in order. Record their thoughts or stories after they have the pictures in order.

Creative Dramatics
Use a story that has a clear sequence of events and action and a simple dialogue. Fairy tales are excellent stories to use. Guide the children's recall of the sequence of events or episodes. Name the characters and the actions. Review the dialogue for each episode. Example:

Episode 1. Characters: Little Red Riding Hood, Mother
Actions: Mother giving cookies & flowers to Little Red Riding Hood, talking to her, and saying good-bye
Dialogue: Mother tells Little Red Riding Hood to take cookies and flowers to Grandmother's, Mother tells Little Red Riding Hood not to stop and talk to anyone. They say good bye.
Episode 2. Character: Little Red Riding Hood, Wolf
Actions: Walks in the woods, picks flowers, sings, meets wolf
Dialogue: Wolf asks Little Red Riding Hood questions about where she's going. Little Red Riding Hood tells wolf what her mother said and where she is going.

The planning for creative dramatics should be elicited from children through discussion and questioning. Before the play begins, the group must decide the location within the room for the scenes and the entrances the characters will use. Provide simple props.
When all plans are made, children act out the story using as little guidance as necessary.

Puppets
Use the procedures described under **Creative Dramatics**.

Materials

The variety of materials teachers can use with children is endless and is limited only by the teacher's imagination. At their best, materials can make learning fun and alive, used poorly, materials become busywork, frequently turning children off to the joys of reading and writing before they have known their joys.

It is important to have many materials at different levels of difficulty. For example, when working with visual discrimination some children might best match the textures of small rug samples, while other children might be matching letters and words. It is a temptation to give all children workbooks at the same time, when in fact very few kindergarten children are ready for workbooks. Children often do not possess the eye-hand and fine motor coordination to work in workbooks with ease. A wealth of other stimulating, interesting materials and activities can be used to give children the same opportunities to learn the skills which workbooks develop.

When choosing materials, select those which allow children to learn a skill. These materials should provide for systematic development of skills. Other materials should be used for independent activities to allow children to practice skills already acquired.

Suggestions for Materials

Start with a good supply of *books*. These should be numerous picture books for children to look at, resource books for each science and social studies unit, and books for teachers to read to children during story time.

Bulletin board displays, weather charts, helpers charts, and *reminders* on the chalkboard focus children's attention on new events and make words meaningful to them.

Experience stories based on science experiments, funny happenings in the room, classroom pets, are valuable to children. Charts of nursery rhymes and repetitive songs are learned quickly by children and encourage them to try reading other materials.

Recordings of stories, plays, poems and songs can be the starting point for discussing the quality of the work, i.e., the sound effects, music and appropriateness of the voices used. As children become aware of these qualities, class stories, songs and poems can be prepared by small groups of children.

Clippings of advertisements, magazines, and catalogs are an inexpensive way of providing materials of interest to students. They are excellent reading materials and make good points of departure for class or group discussions.

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Mathematics

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Rationale. The mathematics program is concerned with helping the child see order and meaning in the situations that occur in his or her day-to-day activities.

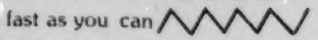
Program Goals. Mathematics is based on sequence and order. The aims of learning mathematics are:

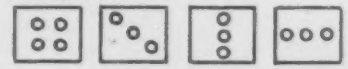
- to free students to think for themselves
- to provide an environment that allows students to discover *order, pattern* and *relationships*
- to help students master necessary skills

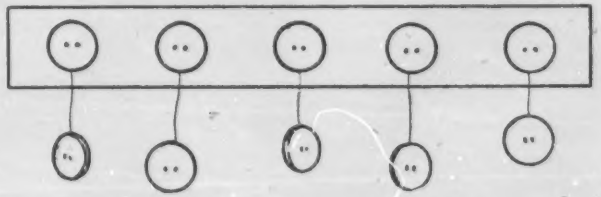
Remember:

1. Children must see, hear, feel, taste, smell and do.
2. Children must do things over and over to reassure themselves that what they have learned is true.
3. This practice should be enjoyable.
4. Basic mathematics (number, time, space, measurement, etc.) cannot be taught in isolation from natural experiences of the environment.

Understandings to Develop	Activities	Materials
1. **Exploring**.		
a. Materials are varied and many.	Have children collect learning materials from home.	lids, keys, bottlecaps, buttons, shells, jars, popsicle sticks, straws, ceremic tiles, poker chips, nails, etc
b. Rules are necessary.	Discuss the importance of never throwing materials away and that only the person working with the materials has the right to tear down or put away what they are working with.	same as above
c. Experimenting alone helps one make new discoveries.	Provide many opportunities for children to explore a wide variety of materials.	same as above
2. **Discrimination**. (usually deals with only two elements at a time) Objects may be compared to determine if they are "alike".	Provide materials to help children visually discriminate differences and then explain the differences.	children; objects, pictures, shapes, colors
3. **Ordering**. Using their physical, visual and auditory channels, children should learn to:		
a. Analyze Patterns	Ask the child to look carefully at a pattern design and then discuss how it looks and what makes the design.	blocks, beads, pattern cards, unifex cubes, attribute blocks, geoboards, children, chairs, etc.
b. Reproduce patterns	Present the child with any of the suggested materials in the form of a pattern design. Ask the child to look at the design carefully and then close his/her eyes. The teacher then makes a minor change in the design. Ask the child to open his/her eyes and discuss the change.	children, blocks, beads, etc.
	Act out patterns-create patterns using children as models. (Sit-stand-sit-stand etc.)	

Understandings to Develop	Activities	Materials
	Teacher uses chalk and draws a leader line. The children follow the line and act out what the line tells them to do. Children must know ahead of time what the line means. Example: hop on one foot _ _ _ _ _ _ _ run as fast as you can 	
	Have the children draw pictures showing people sitting and standing. They can act out their pattern and/or verbalize the visual results in a variety of ways. Have one child turn over three pictures, one at a time. Half of the children can act out the pattern and half can watch. Use a flashlight to "point" to each child as it is his/her turn and to keep a steady beat.	
	Copy a pattern by placing blocks, beads, etc. **on** the pattern. (superimpose)	
	Using same materials as original pattern, make the same design. (Ex.: string beads, clap a pattern, dot chart, actual blocks, block patterns).	
	NOTE: When reproducing or duplicating patterns begin with one attribute then two or more: color only, shape only, colors and shapes, colors, shapes and sizes.	
	Change a pattern to a different form. A pattern may be clapped then reproduced with blocks, unifex cubes, etc.	
c. Complete/Extend Patterns	Using any of the materials and patterns previously mentioned, have the child continue to extend the pattern.	same as preceding two lists
d. Verbalize Patterns	Ask the child to discuss a pattern, to be able to see and explain it.	a pattern
e. Create Patterns	Patterns can be created by: using objects such as people, chairs, straws, blocks, paper, place mats, necklaces, designs, wrapping paper.	same as preceding three lists
4. **Sorting and Classifying** (Learning to select one property and ignore others and to use words to label the sorted groups.) NOTE: Being able to compare and contrast is the basis for set-making skills.	Sort by shape, color, size, or feel. Show children one attribute and have them find all the ones that are alike.	junk boxes, rocks, shells, shapes, children, nuts, keys, pencils, money, geoboards, etc.
	String beads by color and shape.	beads
	Have children group or sort objects that are alike from an assortment of materials. Categories could be: small, medium, large, color, shape, size, fat and thin, number of thread holes, heads on nails.	buttons, nails, marbles, beans, beads, rocks, material, cards, wallpaper, etc.
	Sort by people, places, or things; food, clothing, or shelter; boys and girls; happy or sad; toys and not toys, color; shape; thick or thin; transportation vehicles; items bought at different stores; things that fly; living, nonliving.	pictures

Understandings to Develop	Activities	Materials
	Sort letters or numerals. Match all of the letters or numerals that are the same. Next do two and three letter words--no, fat, me, etc.	letters/numerals
	Sort objects according to what they are made of--wood, metal, papers, glass, rubber, plastic, leather, etc.	objects
	Give each group a sack containing the same items. Have the group sort and classify according to a category they choose. Then have them "visit" each group to see all the different ways to sort the same items. Discuss.	paper sacks for each group, objects in each sack
5. **Counting** Counting is rote memorization to learn the names and order of the numerals. However, *knowing* and *using* the sequence are vastly different. Children *must* learn to count with *skill* and *understanding*!	Count in unison as well as alone. Use counting experiences daily in problem solving situations as well as for information. Provide opportunities for children to count to one number beyond the point where they have difficulty.	anything!
	NOTE: Learning takes time and children need support and confidence.	
	Use stories, poetry, music and finger plays where counting is needed.	stories, poems, music, finger plays
6. **Concept of Number**		
a. Each number contains combinations of numbers. NOTE: Understanding numbers greater than five depends on the concepts discovered for five and below. If a child sees 7, he/she does not think "7" but separates it into 4 and 3, or 5 and 2, and then 7. A firm understanding of number concepts 1 to 5 will help prepare children for dealing with abstract numbers later on.	Provide unlimited opportunities for children to make discoveries about the concept of numbers from 1 to 10. Number centers could be set up with the number to be explored designated. Encourage children to create patterns using the center materials and the number designated.	junk: toothpicks, jewelry, beans, shells, blocks, rocks, tiles, geoboards, pattern blocks, unifex cubes, etc.
b. Two groups, which contain the same number of components, will correspond one to one. **Level I**--correspondence of matching objects (milk straws to milk cartons) **Level II**--correspondence of similar objects **Level III**--two sets of totally unlike objects to match to each other.	In each level you should ask if there are more, less, or the same number of objects in each set. Ask children to compare sets of objects that are first concrete and then abstract. **Always** work only one number beyond the child's level of understanding.	unlimited--any materials desirable or available.
c. A quantity can be recognized without counting. (visual memory)	One person uses the overhead and places one card down while the rest tell how many holes they see as quickly as they can. Use the cards as templates and the children can color the groups of dots, thus creating books.	overhead projector; cards with holes punched to show combinations. No card has more than six holes, but the holes are placed in different orders. Example: 

Understandings to Develop	Activities	Materials
d. Conservation of number (The ability to determine a one-to-one correspondence of objects, volume or size, and then recognize that the arrangement or container does not affect outcome.) Children must understand conservation of quality before they can develop the concept of number. Conservation is a *logical concept*, not a numerical notion.	a. Use one container of water, pour into another container. Let children experiment with varying shaped containers. b. Arrange objects in one form · change arrangement, number remains constant. c. Cut pieces of string the same length. Have children create pictures using string. The length does not change. d. Link each member of one set to each member of another set with a piece of masking tape or string.	(a) containers with liquid (b) arrangements of objects (c) string of the same length (d) buttons attached to buttons by string
		
	e. Make a set of five cards with five different arrangements of dots for each number. Substitute a card from one set for a card from another. "Which does not belong?"	(e) Match Me cards
7. **Relating Numbers to Symbols** Each number concept has a written symbol to represent it.	Label children's work; introduce numerals as counting and/or one-to-one correspondence. Use variety of symbol cards with objects. Child matches the correct number of objects with the correct symbol. NOTE: Children should be introduced only to the symbols they understand. Do not expect them to write the symbols unless their fine motor coordination is sufficiently developed to assure their success.	cards with the written symbol, objects to count, pictures with sets, numeral cards to match
8. **Measurement**		
a. Size, shape, or quantity relationships of objects or sets of objects	Students should show they understand the following relationships: big(ger)(gest) / little(r)(st) long(er)(est) / short(er)(est) tall(er)(est) / short(er)(est) large(r)(st) / small(er)(est) same / different like / unlike (alike / not alike) many (more than / few(er) all / none / some heavy(ier)(iest) / light(er)(est) most / least (number property) less than / greater (more) than equivalent sets (same number)	people, concrete objects, pictures
b. Position relations	inside/outside top/bottom above/below under/over up/down far/near first/last left(of)/right(of) middle between around row/column close(to)/away(from) beside/next to in front of/behind high(er)(est)/low(er)(est)	same as preceding item

Understandings to Develop	Activities	Materials
c. Time and temperature relations	beginning/ending young(er)(est)/old(er)(est) before/after hot(ter)(test)/cold(er)(est) early(ier)(iest)/late(r)(st) cool(er)(est)/warm(er)(est)	people, objects, pictures
d. Money: identify and name	Pennies, nickels, dimes, etc.	coins
e. Times of day	Identify duration of time: run races; beat the clock. Example: how many times to bounce the ball. Use estimation. Punch holes of different sizes in three cans of the same size. Paint each can a different color. Call one "short time", another "long time". Using sand or water will help build the idea of time units, such as minutes, hours, days, weeks, etc.	real and/or paper clocks, stories, pictures, egg timer, stop watch, balls, three cans, water or sand
f. Calendar	Define week, day, month, year. Give each child a calendar to keep daily.	calendar
g. Thermometer	Define temperature. What is hot or cold? Talk about weather and clothing. Make candy and use a candy thermometer. Keep track of an outdoor thermometer's readings at different times of the day.	outdoor and candy thermometers
h. Read a 12-hour clock to the nearest hour.	Make cards with the time showing. Lay cards face down. Play like the game "Concentration". Child must tell the time on each card. If the times are the same, he/she can keep them.	cards with various times on them
9. **Graphing** (a natural outgrowth of sorting, classifying and determining which group has more or less)		
a. Level I--real graphs (concrete objects)	Compare first two then three groups of objects. Use real objects: chocolate/sugar cookies; empty/full paint cans; brown/blue eyes; buckle/tie shoes; scary/funny Halloween masks. Place objects in a one-to-one situation. Record using real objects.	real objects for graphing
b. Level II--Picture graphs	Two or three groups. Have children draw pictures, for example, of themselves, and then record using pictures.	pictures, for example of sugar, chocolate chip or peanut butter cookies, for graphing
c. Level III--Real graphs, Picture graphs	Four groups. Put pellets in a large container. Provide three different sized containers. Measure how many small paper cups of pellets there are in each container. Record on sheet using pictures.	pellets and various sized containers. Use paper cups, bottles, lids. Use pictures to show amount of pellets
d. Level IV--Symbolic graphs All graphing should be related to actual class experiences and experiments and used in a problem-solving situation.	(a) Four groups or more. Checks (✓✓✓✓) are used as the symbols of real objects or pictures. (b) Do you have a pet at home? yes ✓✓✓ no ✓✓	charts or graphs.

Understandings to Develop	Activities	Materials
10. Geometry		
a. Lines and endpoints	Connect two given points with a "path" using a pencil and name these points the "endpoints" of the path.	maze designs
b. Open and closed curves	Use materials to create a face, eyes closed curve, nose open curve. Identify open and closed curves.	pipe cleaners, clay, string
c. Interior and exterior of a closed curve	Draw a simple closed curve on a balloon. Place an X inside. No amount of pushing, pulling, etc. will result in the X being on the outside. Shape a piece of clay like a doughnut.	balloons, clay
d. Congruent objects	Match at least two congruent objects in a set of objects by superimposing. Draw shapes on heavy plastic coated paper. (Bacon package inserts are good to use.) Make a game board with the outline of similar shapes. Superimpose shapes on identical outlines.	heavy cardboard for game board, plastic coated paper for shapes
e. Similar objects	Match at least two similar (by shape) objects in a set of objects or pictures; for example, buttons: no holes, 2 or 4 holes; tie shoes and non-tie shoes, etc.	buttons, pictures, shoes, coats
f. Properties of objects (color, size, mass, shape, density, function, etc.)	Ask children to describe and tell about objects.	envelopes, balls, blocks, unifex cubes, etc
g. Parts of a whole	Assemble the parts of a simple object, given a model of the completed object such as: caterpillar made of egg cartons, airplane made of tongue depressors, etc.	egg cartons, pipe cleaners, tongue depressors

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Physical Education

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. . . and others

Physical education is a process that contributes to the development of the individual through the natural medium of physical activity which is human movement, while recognizing the unique characteristics of children physically, mentally, emotionally and socially.

Physical development includes physical fitness, coordination and motor skills.

Social development includes interpersonal relationships, good citizenship, cooperation and leadership.

Emotional development includes adjusting to stress, learning to accept victory and defeat gracefully, possessing the courage to persevere and to face physical danger.

Intellectual development includes the acquisition of knowledge and appreciations. Involved in this objective is giving students background information about the activity, terminology, rules and fundamentals.

In order to develop a child-centered physical education program, children's characteristics and needs must be clearly understood. The following chart interprets identified needs in relation to physical education activities.

Kindergarten Age Characteristics*

Children: As They Are	Children: What They Need
1. Structural growth rapid at the beginning of this period; slowing down toward the end of the period. Large muscles (trunk, legs, and arms) more developed than smaller muscles (hands and feet)	1. Big muscle activities that involve many parts of the body, such as running, hopping, and throwing to help large muscle development keep pace with structural development; also activities with beanbags; bouncing of balls, and passing of objects of various sizes to help the development of smaller muscles
2. Heart and lungs small in proportion to height and weight	2. Large muscle activities, as suggested above, followed by periods of rest
3. Extremely active; seldom admitting fatigue	3. Vigorous activities in which all can take part, followed by quiet activities; encouragement to rest when tired
4. Coordination developing slowly	4. Opportunities to practice body control skills through such activities as balancing on a line, squatting, ball bouncing, locomotor and body movements to rhythmical accompaniment, and physical fitness activities
5. Generally farsighted; unable to focus quickly or accurately	5. Activities using large balls and stationary targets
6. Individualistic; possessive	6. Physical fitness and self-testing activities, practice of fundamental skills with and without rhythmical accompaniment, and other opportunities for pupils to perform individually; games for small and large groups that provide opportunities for pupils to share equipment, take turns, etc.
7. Dramatic; imaginative; curious; imitative	7. "Pretend" games, creative rhythms, and singing games that provide opportunities for pupils to dramatize, pretend, explore, and imitate

*Taken from *Physical Education in the Elementary School: Kindergarten*. Austin, Texas: Texas Education Agency, 1969.

Children: As They Are	Children: What They Need
8. Extremely responsive to rhythmic sounds	8. Opportunities to respond to percussive and musical accompaniment
9. Varying greatly in emotional reactions, some being shy and avoiding group activity, and others self assertive and domineering	9. Activities with simple directions or rules to be followed. Repetition of these activities, to give the shy child a feeling of security and to develop desirable group skills
10. Attention span very short	10. Many different activities with simple directions and of short duration.

Carefully planned and conducted programs of physical education should contribute to the physical, emotional, social and intellectual development of the kindergarten age child. The teacher should have concern for the whole child with varying emphasis based on individual needs. A balanced program will include:

- Movement exploration
- Fundamental skills (walking, running, skipping, hopping, jumping, throwing, catching)
- Appropriate games
- Rhythmic Activities
- Story plays
- Self-testing activities involving the fundamental skills

The more a child participates in a variety of the above activities, the more that child will experience both success and enjoyment. In order to provide for the emotional, social and intellectual needs of the child, the following objectives must be included as an integral part of the total program:

1. Following directions
2. Positive self-concept
3. Self-control
4. Cooperation
5. Consideration
6. Independent problem solving
7. Responsibility
8. Acceptance of rules and daily procedures
9. Conduct with apparatus and manipulative equipment

The entire physical development of a child is largely the result of the child's venturing forth into increasing life space which is called movement exploration. Before children can experience success in games, dances and stunts, they need to explore movement to find out what their bodies can do and what their body parts can do in relation to the elements of time, space, objectives and other children. Classroom teachers have found movement exploration an effective technique for developing motor skills.

Approaches to Explorations

1. Personal Space: a space selected by an individual for performance of activities.
   General Space: moving about the entire area
2. Size: large, small, wide, narrow
3. Speed: fast, slow
4. Direction: forward, backward, sideward, over and under
5. Level: high, low, medium
6. Force: strong, weak, heavy, light
7. Sound: noisy, quiet
8. Path: straight, curving, spiraling and zig-zag
9. Design of shapes: changing position of body parts

Movement exploration assists the child in discovering personal ways of moving. This is initiated through questions or problem situations rather than specific directions. Since children are different, they will respond to problems in various ways. All children need time to experiment with movements and to evaluate the movements of others.

Objectives of movement exploration include the following:

1. to improve motor perceptual skills and stimulate creativity
2. to have all children physically and mentally engaged in vigorous activity, exercise, and adventure at the same time
3. to provide successful experiences for each child even though the quality of movement varies with each child
4. to help children discover how parts of the body move in relation to the entire body

Lessons are concerned with why, where, how, what and with whom we move. Children should answer these questions with their own movements. Lessons, which are usually based on fundamental skills, are suggested in the following problems in movement:

Suggested Problems in Movement*

1. Find a space on the floor that will be your place. See if you can move your arms out wide and not touch anyone. If you touch someone, see where you can move and not be able to touch anyone.
2. How many ways can you walk? (Any other locomotor movement can be used -- running, skipping, hopping.)
3. In how many directions can you walk?
4. Can you walk and then do something else, but continue to go forward?
5. How many ways can you move forward before you touch the wall?
6. What can you move and stay in place?
7. How many ways can you move your arms? (Also, legs, shoulders, hips, feet, fingers, toes, head, etc.)
8. Can you walk and move some other part of the body at the same time?
9. Can you stand in place and move your arms and something else at the same time?
10. How tall can you be? How small can you be? How wide? How thin?

*Ibid. pp. 22-23.

Movement exploration is an integral part of the total physical education program. It is also evidenced in learning experiences in related areas such as music, art, social studies and others.

At the same time that work in basic movement skills is underway, in the primary grades, games of low organization in which the skills are used in a variety of ways are introduced. In this way the child begins to recognize the purposes and values of good skills. The more confining game situation demands a cognitive process in the use of skills as well as physical prowess. Most games provide vigorous activity; however, there are games designed for inactive relaxation and confined spaces.

Each class period should be planned so that the majority of time is spent in vigorous activity; each game that is presented should provide an opportunity for as many members of the class as possible to be active. Learning results only from doing. Game descriptions should be analyzed to determine how many children may be active at one time and how large a group is necessary to make a game playable.

Only very simple games are appropriate for the kindergarten. Games suggested are those which have few rules, limited group cooperation, little competition, and do not demand refined coordination movements not yet developed by the child. The most successful games are those in which many children participate at the same time rather than those in which most children are inactive and only a few are active. Examples of such games are: "Tag", "Looby Lou", and "Here We Go Round the Mulberry Bush". Imitative games such as "Follow the Leader" and "Simon Says" are also appropriate.

One important objective of kindergarten is to help the child learn how to become part of a group. Rhythmic activities provide an ideal vehicle for this objective.

1. Rhythm skills - fundamental locomotor and non-locomotor skills performed to rhythmical accompaniment and dance skills needed for specific activities.
2. Creative rhythms - movement exploration activities performed to music. In creative rhythms the body is the instrument of expression.
3. Singing games - prescribed activities with directions to be followed. Children learn the song as well as the action to accompany the song.

Story plays are similar to creative rhythms in that they promote the feeling of "groupness." These plays generally consist of a series of bodily movements based on story. All participants do the actions together as the story unfolds. In planning story plays, the following consideration should provide that the play: be related to experiences of children, be created by the teacher with the help of the children, and promote the use of large muscles.

Objectives

1. Children will participate in basic movement exploration activities.

2. Children will participate in gymnastics.

Selected Activities

Teacher will include exploratory activities in which children:

Walk, jump, hop, skip, gallop, slide, run, and leap
Stand, sit, squat, fall, relax, start and stop
Find a space on the floor without touching anyone or anything
Move in space without colliding with others
Move freely in many ways using large movements
Know several ways that arms, legs, feet, and shoulders can move
Walk forward, backward, and sideward on a walking board or on a straight line
Mirror arm and/or leg movements
Identify the following parts of the body---shoulders, ankles, arms, feet, legs, head, hips, mouth, eyes, nose, ears, fingers, knees and toes
Bend and stretch, swing and sway, push and pull, twist and turn, and shake and bounce

Present activities in which children:

Frog hop a short distance
All-four walk a short distance
Bear walk a short distance
Take turns with equipment
Hang from chinning bar for five seconds using regular and reverse grips
Crawl through a barrel without touching sides
Walk a balance board forward, backward, and sideward
Walk a balance board forward, turn, and return to starting place
Walk a balance board with left foot or right foot always in front
Climb a pole or rope a distance equal to child's height
Climb and come down a jungle gym or similar piece of apparatus
Log roll and forward roll
Mount and dismount a horizontal ladder
Hang and drop properly from a rung on the horizontal ladder
Climb around the lowest level of a jungle gym
Perform three stationary and two moving stunts

Objectives	Selected Activities
3. Children will participate in rhythmic activities and singing games and stories.	Provide opportunities for children to: Recognize and clap even and uneven rhythms Form a single circle and move counterclockwise Walk, hop, and jump to even rhythm Gallop and slide to uneven rhythm Swing and sway, bend and stretch, push and pull to even rhythm March along with marching music Start and stop with accompaniment Walk with a partner to accompaniment Imitate familiar animals and toys to accompaniment Know songs and perform eight singing games Respond creatively to story songs
4. Children will participate in game and sport activities.	Provide activities in which children will: Roll a large ball and hit a wastebasket from a distance of ten feet Bounce a ball five times using both hands Toss a beanbag into the air and catch it Toss and arm catch a ball from a distance of eight feet Pass objects of various sizes Jump over a slow swinging rope three times Play eight large and small group games Start and stop on signal Tag a runner without grabbing his/her clothes or pushing Run without falling
5. Children will develop attitudes of good sportsmanship.	Observe children systematically: Note needs and progress Set up simulation activities Assist individual children Praise appropriate actions Repeat activities as necessary Include games that promote good habits such as taking turns, following directions, working together, recognizing boundaries, being a leader, and many others
6. Children will practice habits of safety.	Provide a teaching organization suitable to the activity Select activities appropriate to the individual child's ability Help children develop an awareness of the need for safety in movement and in relation to others Encourage children to increasingly practice self discipline
7. Children will mature emotionally.	Communicate through words and actions that teacher is aware of each child Gradually include activities with appropriate stress and competition levels Help children accept difficulties and failures as normal Insure understanding of directions by giving them clearly and one at a time Encourage children to accept variation in the performance abilities of other children as well as themselves

Participation in a well planned physical education program is the prerogative of every child. For those with handicaps the regular program must be adapted to meet their needs. Adapted physical education in the elementary school is not a corrective program. If a child's particular handicap requires therapy or correction, this must be conducted by a specialist trained in corrective procedures working under the prescriptive advice of the child's physician.

Children who may need adaptive physical education vary from children who have been inactive for a few days to those who have a temporary or permanent physical handicap. Approximately one out of ten children deviates from the average, in some aspect of physical, mental, social or emotional development and behavior. However, a child usually deviates from the average in only one of these aspects and has normal needs, desires and abilities in the others. Therefore, the child needs to participate in a comprehensive program similar to that of his or her peers. It is essential that the learning experiences be adapted to the child's limitations. If a child does not have the opportunity to participate in typical activities of the peer group, problems and limitations may grow and thus handicap the child further.

Adaptive physical education does not mean letting the child keep score or tasks of a similar nature. It means adapting activities for participation in the activity. There may be some activities which cannot be adapted. Neither should the adaptation be so great as to interfere with the normal progress of the majority of children in the class. Ingenuity is the key to a successful adaptive program. Care must be taken that:

- The teacher has complete information regarding the handicap in order to make the appropriate adjustment.
- The physician and parent have given permission for the child to participate and the degree to which participation is permitted.
- The other children in the class are aware of the limitations and necessary adjustments and learn to accept them.
- The school administrator provides leadership to teachers and parents in planning adaptations as well as referring children (as necessary) to appropriate personnel.

In addition to the general objectives of the program, there are certain objectives that need to be emphasized for the handicapped child.

1. The child must develop a positive and realistic attitude toward capabilities and limitations.
2. The child must learn to be self-directive as to the extent of his or her participation.
3. The child must acquire a knowledge of and skill in a variety of games and activities in which he or she can participate alone or with others.

Permission from both parent and physician should be in writing and on file.

Material on Adaptive Physical Education derived from: Edna Engberg, *Physical Education Activities for the Physically Handicapped* Springfield, Ill., Office of the Superintendent of Public Instruction, 1963.

Equipment Selection and Use

The amount of equipment that should be available is not specified, since it varies with variations in scheduling, available teaching situations, the number of students in classes, and teaching methods. The principle criterion is that enough of any given type of equipment be available to prevent children from having to waste valuable class time waiting their turns.

If equipment is in short supply, the teacher must improvise by varying the organization of the classes and/or providing additional equipment. Types of class organizations that permit small-group instruction are squads, stations and circuits. The development of equipment should be undertaken by the students as well as the teacher. Useful references for producing equipment are *Inexpensive Physical Education Equipment for Children* (Werner and Simmons, 1976); *Inexpensive Equipment for Games, Play and Physical Activity* (Corbin, 1972); and *The Beanbag Curriculum* (Christian, 1973).

Equipment should be selected according to the following criteria:

1. Does it provide novel and age-appropriate movement stimuli?
2. Will it evoke a variety of movement patterns or does it tend to prescribe limited possibilities for movement?
3. Is it structurally appropriate to children of the size and age range for whom it is intended?
4. Is it appropriate for children of different interests and varied skill and ability levels?
5. Is it durable, attractive, colorful, and easily maintained in a safe condition?
6. Can the surface areas under and around the equipment be easily maintained?
7. Is there enough for every student?

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Science

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At the kindergarten level children learn best by doing activities. Knowledge is gained through using processes basic to learning and essential to science learning. Research cited by Jean Piaget indicates that an experiential-based science program (hands-on), with an inquiry approach which capitalizes on the student's natural curiosities, is preferred.

Science can be defined as an attempt to explain the universe of which we are a part. At the kindergarten level, scientific studies should involve experiences basic to learning and these studies should be interrelated with other areas of study. Research indicates that science can be a basis for language and reading development. Science activities should grow out of the child's past experiences, natural curiosity, environments and future needs, with instruction designed to nurture personal creativity.

Three major goals for the science curriculum are:

- to apply science processes as a part of basic learning
- to communicate knowledge of natural phenomena
- to use scientific knowledge in comprehending the impact of science and technology

Goal 1. To apply science processes as a part of basic learning.

Science Processes	Sample Activities & Objectives	Materials
1. Observing: Using the senses to obtain information or data about objects	**Surprise Seeds**. Children should plant seeds in a growth medium, care for them and tell about their growth.	plastic containers and/or milk containers; soil/vermiculite, perilite; seeds: mung beans, rye grass, Mimosa
	Mirrors & Shapes. Children should state how images of objects look in a plane mirror and explain how the images move "in" the mirror.	storage box; small objects; aluminum mirrors
	Does It Grab? Children should place objects into two groups based on their magnetic properties, being right at least 60% of the time. Challenge the children to sort the materials with the magnets.	storage box; at least two magnets: horseshoe and/or bar-pole; small junk: bottle caps, washers, buttons, yarn, string, rubber bands, etc.; cloth bags

Science Processes	Sample Activities & Objectives	Materials
2. Classifying: Imposing order on collections of objects and events to show similarities, differences and interrelationships	**Kinds of Shells**. Children should differentiate a group of shells into types by shape.	bags of mixed shells, muffin pans for sorting
	Organizing Stones. Children should devise a sorting scheme (for example, by color, size or texture, but children may use other characteristics).	storage box; bags of stones; muffin pans for sorting
	Does It Roll? Children should explore and see what objects will roll down an inclined plane. NOTE: The term "roll" may have to be explained by the teacher.	storage box; a ramp 2" x 10" x 1/8-14"; block of wood; a tube of some type; ball of clay; hand sized junk: wheels, shells, rocks, balls, blocks, etc.; small painted boxes; cloth bags; sorting pans
3. Measuring: Quantifying observations using a standard		
a. Length	**Metric Tubes**. Children should use a metric ruler or centimeter stick and be able to tell how many tubes are longer than, shorter than, and equal to 10 cm.	storage box; painted cardboard tubes; cm sticks; painted toilet paper rolls
b. Volume	**Measuring Things**. Children should measure the volume of various containers using the volume of a 35 mm film can as a standard and tell how many cans fill a container within an accuracy of one film can.	storage box; sand, sugar, salt or rice; 35 mm film cans; plastic containers (volume should be less than 10 film cans)
c. Estimation	**Off and On**. Children should physically manipulate nuts and bolts found in a box. (Six to eight bolts should be glued to a board.) Children should place at least 50% of the nuts on the proper bolts. (Order of nuts on the bolts is not important.)	storage box; bolt board; matching set of nuts in a sack
4. Communicating: Verbally giving accurate descriptions of objects, places and things	**Jewel Hunt**. Children should develop classification skills and abilities to look at characteristic properties. After they have found a "jewel" hidden in the sand, ask them to predict what other objects they will find. Repeat this after more finds. Also suggest they name the treasure. Accept all names and add none.	costume jewelry; sieves, sand or salt, [illegible] muffin pans; small cloth sacks; tools; storage box
	Bolts & Blindfolds. Children should manipulate nuts on bolts and talk about what they are doing. They should place at least 50% of the nuts accurately and are also expected to take the materials out of the box and put them away.	board with bolts; nuts and bolts (the bolt should protrude 1½" or more from the board); small sacks for nuts; cloth hoods for blindfolds; storage box
5. Using Numbers: Expressing measurements and relationships in quantitative terms	**Jars & Lids**. Children should attach lids to the correct containers. (Praise the children for any successes. In this activity they develop skills of recognizing relationships of objects that fit together and of organizing objects by relationships.)	10-15 jars with lids (all different sizes); film cans; storage box
	Cans & Corks. Children should sort corks by sizes into different cans and count the number of corks contained in any one can.	empty tin cans; many different sized corks; storage box

Goal 2. To communicate knowledge of natural phenomena.

Topics to Explore	Sample Activities & Objectives	Materials
1. Color	**Color Variation**. Children should organize paint chips or paper samples of major colors from light to dark, getting five out of six correct.	paint chips from paint companies or colored cut-outs from paint ads that are on exhibit cards; an organizing sheet marked as follows:

Topics to Explore	Sample Activities & Objectives	Materials
2. Characteristics of Materials	**Strings, Strands & Wires**. Children, using strings, strands and wires, should explain the relative rigidity of the objects.	a collection of "rods" one dc. long; metal welding rods; wire: copper, steel, aluminum, sodder (at least two types); wooden dowels 1/8", 3/16", ¼"; rope: hemp, cotton; thick & thin yarn; string; cord; organizing board with ¼" grooves; storage box
3. Plant Parts	**Flowers, Leaves, Stems & Roots**. Children should name the four parts of a plant model (root, stem, leaves, flowers) and accurately compare the model with real plants three out of four times.	storage box for the simple plant model (3-D model, 2-D model, or a giant picture); real plants: with flower, without flower, cacti, fern, carrot with top, cut flower
4. Animal "Coats"	**Hair, Scale & Feathers**. Given a set of animal pictures and cards with animal "coats," "skins" or "coverings," the children should accurately group 80% of the animal pictures with the key cards.	storage box for animal pictures cut out from sources like: *National Geographic, National Wildlife, Natural History, Ranger Rick*, animal books or coloring books; key cards of: real fur, feathers, scales (instead of cards, you may use good sketches or photographs)
5. Weather	**Rain, Snow & Ice**. Children should explain the difference between rain, snow and ice after they have observed and touched them.	snow; ice; rain water
6. Soil Pieces	**Sand, Gravel & Rocks**. Children should separate a mixture of sand, rocks and gravel into three piles by size of the pieces.	storage box; sand, rocks and gravel mix; drop cloth to work on

Goal 3. To use scientific knowledge in comprehending the impact of science and technology.

Topics to Explore	Sample Activities & Objectives	Materials
1. Edible Fruits	**Apples, Oranges & Bananas**. Children should tell what part(s) of these fruits are eaten and what happens to the part(s) not eaten.	a tape player & prepared question tape: 1) name the fruits, 2) give the color of each, 3) where can you buy them? 4) how does each taste? 5) how much do they cost? 6) which fruit has the biggest seeds?
2. Combinations of Food	**Make a Sandwich**. Children should make sandwiches (using either real or "let's pretend" items) and be able to tell the origin of the sandwich components.	real food items or "let's pretend" cut-outs
3. Gardening	**Wanted Plants**. Children should germinate six seeds (two types), observe their growth and then decide which emerging plants are weeds and which are not.	seeds: grass, rye, clover, mung beans, alfalfa, cress; soil; containers
4. Environments	**Air, Land & Water**. Children should match picture cards with three natural resource topics and then sort the cards into good and bad environments.	containers for soil; water sprinklers; weed pickers; dioramas of air, land & water; six pictures of creatures & conditions related to each natural topic mounted on cards: AIR---clouds or storm, balloons, CO_2 extinguishers, air pump, air hose, flat football WATER---glass of spilled water, ice cube, waterfall, raindrops, 7-Up, tank of water LAND---spading, soil, potted plant tipped over, garden, cornfield, rock formation, fossil

Topics to Explore	Sample Activities & Objectives	Materials
5. Energy	**Hot & Cold**. Children should sort pictures of hot and cold items with 80% accuracy and rank them from coldest to hottest.	picture cards; icicle, snow drift, bacon in a pan, lighted candle
6. Technology	**Tools**. Children should match pictures of tools with the objects they are used with (with 80% accuracy). They should also explain how each tool is used.	tools & their objects: wrench & bolts or nuts, hammer & nail, hacksaw & blade, screwdriver & screws, brace & bits, drill & drill bits, clipper & wire

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Social Studies

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Rationale

The social studies program is that part of the school's general educational experience that is concerned with preparing young citizens for active participation in American society.

The kindergarten classroom provides a setting which allows students to explore concepts, ideas and skills that may help them become active and effective citizens. The classroom is a living laboratory where students increase their awareness and application of socialization processes such as: cooperation with others, interaction with individuals, respect for self and others, and valuing similarities and differences among people.

The current emphasis on the basics, i.e., the ability to read, compute and communicate, needs to be recognized, but should not be allowed to negate or to eliminate efforts to provide learning experiences which focus on the major goals of an effective social studies program. Rather, educators should look for and build on opportunities where the goals/objectives of the various curricular areas (reading, science, math and social studies) overlap. By noting these interdisciplinary relationships, teachers can design and use instructional episodes that integrate the learning process for the student, i.e., picture study of family in reading class.

Four major goals for developing a social studies program are:*

1. to develop knowledge for understanding the ever changing relationship between human beings and their environment, past, present and future.
2. to develop skills necessary for working with others to communicate information.
3. to develop an understanding and appreciation of beliefs, values and behavior patterns.
4. to apply knowledge, skills, values, self-awareness and individual creativity through active participation in society.

*Taken from: *Social Studies, K-12. Program of Studies.* Fairfax County Schools, Virginia. September 3, 1974, p. 1. (ERIC ED 110 364)

Social studies, therefore, has four components: knowledge, skills, values, and social participation. These components are the tools the students will need to function as rational decision-makers in the social process.

Planning

When planning a kindergarten social studies program, it is necessary to determine from the overall goals the specific goal-level organizers to be developed.

GOAL 1. To develop knowledge for understanding the ever changing relationship between human beings and their environment, past, present and future.

Kdg. Organizer: *The kindergarten student will explore human relationships through the context of the family, school and the immediate environment.*

GOAL 2. To develop skills necessary for working with others to communicate information.

Kdg. Organizer: *The kindergarten student will use the skills of problem solving, understanding time and sequence, locating self in space, and sharing information while working with others.*

GOAL 3. To develop an understanding and appreciation of beliefs, values and behavior patterns.

Kdg. Organizer: *The kindergarten student will recognize how customs, values and traditions contribute to varying lifestyles.*

GOAL 4. To apply knowledge, skills, values, self-awareness and individual creativity through active participation in society.

Kdg. Organizer: *The kindergarten student will participate effectively in decision-making experiences in a variety of settings, e.g., personal, classroom, small group, family, peer group.*

A school should choose and develop appropriate knowledge, value, and social participation generalizations and skills for each kindergarten organizer listed. Instructional strategies/activities should be developed for each organizer. Examples of knowledge, value, and social participation generalizations and skills with suggested activities are provided on the following pages.

GOAL 1. To develop knowledge for understanding the ever changing relationship between human beings and their environment, past, present and future.

Kdg. Organizer: *The kindergarten student will explore human relationships through the context of the family, school and the immediate environment.*

Examples of Knowledge Generalizations	Possible Activities
1. Each home (family) is a unique unit	Introduce the concept "family" by showing children a large poster-size picture(s) of an adult and child in an apparent or recognizable family-like situation. Ask questions about what family-relationship(s) appear in the picture, e.g., adult may be "helping" the child. Infer what is happening both to adult and child. This will help your children "see" their own family relationships - recognizing that each family is unique and special. Optional activity: give a collection of family-related pictures to a student, asking him/her to select an imaginary family from the pictures. Ask the student to talk about the family. What does the family do? Who guides the family? Who makes decisions? This will reveal the child's understanding of the concept "family." Give each student a series of individual pictures of children and adults. Select an imaginary family and discuss what the children see. What is the family doing? How are the families alike and how are they different? Select a story to read aloud to students about a family and have the students discuss the children in the family. Discuss how the family in the story corresponds with their own family.
2. Behavior acceptable on the playground is not always acceptable in the classroom (school)	Collect two or three pictures showing students in different settings, e.g., "quiet-time experiences" and "noisy-time experiences": story circle — action on playground working at an easel — games resting Discuss what is happening in each picture and compare what the students are doing. Ask the students to consider what appropriate behavior is. What is happening? What is different about each picture? Why is it necessary to have both of these situations --quiet and noisy? Read a story to the class in which a child becomes involved in a behavior problem on the playground. Discuss how the situation is handled. Work together to develop a set of guidelines for playground and classroom behavior. Student responses could be listed on a big sheet of white paper entitled "Our Rules." Responses could include: "We will come in when the bell rings." "We will take turns playing on the swings." "When we play in the corner or room, we will play quietly," and so forth. "Our Rules" list could remain up in the room as an attention-getter throughout the year. Children may wish to add new responses as time passes.

GOAL 1. To develop knowledge for understanding the ever changing relationship between human beings and their environment, past, present and future.

Kdg. Organizer: *The kindergarten student will explore human relationships through the context of the family, school, and the immediate environment.*

Examples of Knowledge Generalizations

Children learn by association with others at home and at school (immediate environment)

Possible Activities

Make a wall chart for recording student responses to "something they have learned" as illustrated below:

"Learning Is Fun"

Learned to:	Home	School
read my name at	_____	_____
brush my teeth at	_____	_____
say my ABC's at	_____	_____
tie my shoes at	_____	_____
write letters at	_____	_____
share with others at	_____	_____

Use some large wooden or cardboard blocks to develop the concept of "immediate environment" with students. After their first exploratory sessions handling and stacking blocks, ask the students to copy their surroundings. Provide additional materials such as butcher paper, pipe stems, crayons, etc., for the youngsters to develop three-dimensional land forms (roads, houses, schoolhouses, stores, trees, etc.) of their immediate environment. The teacher should observe and assess the children's level of thinking while offering remarks or questions which help them better understand the concept of "immediate environment."

GOAL 2. To develop skills necessary for working with others to communicate information.

Kdg. Organizer: *The kindergarten student will use the operational skills of problem solving, understanding time and sequence, locating self in space, and sharing information while working with others.*

Examples of Skills to be Developed	Possible Activities
1. A person's place in space can be determined by his/her relationship to other objects (spatial relationships)	Using a camera, take snapshots of students involved in classroom activities, e.g., sitting in a story-time circle, seated at tables, lined up for dismissal. Have the students discuss the pictures. Encourage each student to identify him/herself and note: his/her location, who is close by, what classroom objects are near, etc. Draw a large diagram of the room identifying some of the key features, e.g., doors, windows, teacher's desk, tables, book shelves, etc. Ask students to point to the location on this diagram that shows where they were located when each snapshot was taken. To build an understanding for words such as: up, down, over, under, etc., give the student a ball of rug yarn, cord or similar material. Ask the student to unroll the line following directions similar to the following: "Take the thread **under** your table, **over** your neighbor's chair, **around** the waste-basket, **through** the door, **below** the easel, **across** the reading table, etc." Ask a second student to roll up the line, stating where the line was as he/she rolls.
2. Yesterday, today, and tomorrow denote the passing of time (time and sequence)	Construct a large calendar for the bulletin board. The numbers should be movable so that the students can turn the date over each day to illustrate time passing. Help students make a list of things that may happen during a month. Design a symbol for the event and the appropriate date. Each day, as the new day/date is discussed, have students review what has happened so far during the month or week and what will be coming soon. Write an experience story describing a class activity, e.g., field trip, visitor, party, etc. Have students note the sequence of events in the story.
3. Personal or group conflicts can be resolved by using problem-solving techniques (problem-solving/working with others)	Read aloud a story in which the characters must figure out a way to solve a problem. Have the students talk about the way the problem was solved. Have the students role play problem situations and illustrate how they would solve the problem.

GOAL 3. To develop an understanding and appreciation of beliefs, values and behavior patterns.

Kdg. Organizer: *The kindergarten student will recognize how customs, values and traditions contribute to varying lifestyles.*

Examples of Value Generalizations	Possible Activities
1. Each child sees himself/herself as a unique person with individual ideas and feelings (self)	Ask students to list "favorites": the story I like best, my favorite food, the game I like to play, the best TV program, etc. Encourage them to note similarities and differences among their ideas and interests. Provide students with art media, i.e., finger paint, water color, crayons, etc. and ask them to illustrate their feelings or ideas to questions/statements such as: "I'm happy when I. . .", For my birthday I would like. . .", My family. . .", Our friends. . ." When illustrations are finished, ask students to share their thoughts about the pictures. Help students note that everyone has his/her own ideas or feelings. Encourage respect for the opinions of others. Make silhouettes of each student. Mount them on contrasting paper and have students discuss the uniqueness of each person.
2. Families provide love, companionship and instruction to their members (roles and purposes)	Have students talk about things they do at home. Ideas offered might be summarized in a simple sketch symbol on an 8x12" piece of card stock. The cards might then be categorized into sets to show examples of love, companionship and instruction. Additional cards could be added to the set whenever students talk about family experiences. New categories or arrangements might be developed. Refer to goal 1, generalization 3, first activity Have students bring their baby book, photograph album, some family pictures, etc. for display. After they have examined the pictures, ask the owners to tell about some of the pictures. Build on ideas presented and help the class to recognize examples of *love, companionship,* and *instruction* given by family members. After discussion, have the class form a generalization to show their understanding of a family's role.
3. Customs, traditions and values contribute to varying lifestyles (community)	Have students discuss how their family celebrates a special day, e.g., birthday, religious holidays, etc. Encourage students to note similarities and differences. Give students old magazines and have them locate and cut out pictures of people working. Mount each picture on construction paper so that it can become a "sort" card. Have students categorize the pictures in a number of ways: jobs that are busy, jobs that are outdoors, jobs that are done by one person and by many people, jobs that look hard. Discuss the ideas that people choose to work in many different ways and may choose jobs that have a special interest for them. Collect a series of pictures showing people celebrating a specific holiday. Have students note differences in the way the various people are behaving.

GOAL 4. To apply knowledge, skills, values, self awareness and individual creativity through active participation in society.

Kdg. Organizer: *The kindergarten student will participate effectively in decision making experiences in a variety of settings, e.g., personal, classroom, small group, family, peer group.*

Examples of Social Participation Generalizations	Possible Activities
1. Social participation first requires a high level of self-concept and self-discipline (acceptance)	Provide a regularly scheduled time for students to share something that is important to them (Share and Tell). Establish a procedure so that the rest of the class is attentive and involved (asking questions, making comments) Arrange room responsibilities/duties so that each student has an opportunity to assume a task. Recognize completion of the task and give positive praise in a realistic way. Plan periodic structured play activities that involve all students. Be sure shy students have positive experiences, i.e., accepted by others, appear happy to participate.
2. Social participation suggests that an individual can become a valuable community resource. (individual social participation)	Display pictures showing boys and girls working on school or community projects, i.e., participating in a paper drive, collecting UNICEF donations, picking up litter, putting trash in garbage cans, etc. Discuss the event shown and ask students if they could replicate the event. Have the class analyze how such activities help others. Organize a "clean-up" day. Have students cover the playground collecting paper, sticks, etc. Invite the school principal to class to view materials picked up. Construct posters encouraging other classrooms to be "...citizens." Develop a class motto or pledge for being "School Helpers".
3. Social participation means working with others in making the home, school and community a better place to live. (teamwork)	After students have become accustomed to an established daily routine, allow them to take leadership roles in the classroom, i.e., taking lunch count, collecting tickets, leading the pledge, etc. Discuss appropriate lunchroom/assembly procedures. Make a list of things that the class could do to help make these operations work more effectively. Read aloud a story in which the characters do something that helps make the home, school or community a better place to live. Discuss the story and create a chart showing the sequence of events. Ask students if they can think of something similar that they might do.

Concepts in the Selection and Use of Materials

When selecting materials or instructional strategies for use with kindergarten students in the social studies, be sure to consider the developmental stage of this age level. Concrete material experiences have a more direct effect on learning than abstract ones. Since it is not always possible to provide first hand experiences (real-life), appropriate situations or simulations should be developed. The curriculum structure and content, instructional materials, and teaching strategies should reflect the contributions and perspectives of men and women as well as diverse cultural-racial groups.

Hints for Developing Classroom Activities

1. **Obtain a variety of resource materials** Presenting information in a variety of ways helps meet many learning modes, i.e., audio, visual, tactile.

2. **Use experience charts** Experience charts help students record thoughts. Students have to re-think what they have seen or heard and put it into their own words. The printed copy of their thoughts allows them to have their own book that they can read and understand.

3. **Try simulations** Students may have difficulty understanding a concept by merely reading or hearing about it. Understanding may be furthered through simulation. For example, a rudimentary notion of mass production can be shown in the primary grades by making gingerbread people. In one group, each child frosts the cookies and puts in the eyes, noses, mouths, and buttons with frosting and raisins. The other group divides the work, with one person putting two drops of white frosting on for the eyes, another putting the two raisins in place, and another putting the red frosting on for the mouth, and so forth. The children can then see which is the faster method.

4. **Role playing dramas** Through role-playing, the students supply alternative endings and discuss the possible solutions to problems. This technique is appealing to most students. Unfinished stories and films offer opportunities for role playing.

5. **Show films and filmstrips** Films and filmstrips are excellent for building background and broadening experiences of students. They can be used very effectively to introduce a unit, enrich learning and to summarize information.

6. **Display study prints** Study prints may serve as an excellent focus for discussion. A typical set consists of a related collection of large full-color pictures centered on a particular topic.

7. **Play records** Records can be used to help students appreciate the cultures of other peoples. From records children can learn the language and music of other lands.

8. **Make recordings** A tape recorder can help provide for student dif[illegible] Information can be recorded for listening or recording students' ideas

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There is an unlimited number of resources available to the kindergarten teacher when planning social studies programs. Listed below are but a few of the more significant resources.

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The Learning Environment

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The physical facilities and equipment of the kindergarten area should be based on the characteristics and needs of the children and the instructional program to be implemented. Satisfactory facilities greatly assist in developing a challenging and satisfactory learning situation.

Program

Adequate consideration of the characteristics and needs of any child can best determine what will be an appropriate and successful environment for that child. In the kindergarten room each child needs a space, equipment and materials for the activities which are designed to nurture and challenge that child. Careful planning and supervision are needed in all activities which require the use of tools, playground equipment, pets and toys. The safety factor is highly important for kindergarten rooms.

The kindergarten program will be dependent on the total elementary program being offered to insure continuity (vertical and horizontal articulation), not fragmentation. Elements of the kindergarten program which are to be considered when planning a facility are: language arts: reading, library, language, handwriting and spelling; arithmetic or mathematics; social studies; fine and practical arts; and health, physical education and safety.

The Physical Setting

In the physical setting, provision must be made for adequate, variable and easily controlled lighting, heat at the floor level, ventilation, and windows low enough so that children can look out. Decoration should be considered a high priority. Select harmonious colors which appeal to young children. Spaces should be open and flexible to provide space in which to play, room to work and to gather in groups. Shelves and cupboards to store equipment and materials should be easily movable, have no dangerous protrusions, and should be scaled to the needs of the young child. Adequate toilet and clean-up facilities, as well as space to store outdoor clothing, should be provided. The total space must be planned to facilitate ease of supervision. The total facility should be conceived of as a laboratory for active learning by five-year-old children.

Main Activity Area should be situated in the central part of the room for games, rhythms, indoor play and major construction projects related to social studies experiences in units on home, store, circus, pet shop, etc.

Work Area is used for creative efforts with boards, boxes, tools. In this area are work tables, benches of suitable size, tool storage cabinets with child-size tools, a work sink with hot and cold water and a storage space for wood and other supplies.

Art Center is for creative efforts with clay, scissors, paper, crayons and paint. The art center has easels, work tables for clay work and finger painting, storage space for clay, large sheets of newsprint, tagboard and colored paper, paints, brushes, paste jars and other art materials.

Science Center is for activities such as planting and watching things grow, conducting simple experiments and observing natural phenomena. The science center may have an aquarium, terrarium, display space for science and nature study materials and storage space for equipment used in simple experiments. An animal center could be incorporated here.

Library Center is for experiences in listening to and telling stories, and examining books. The library center should be located in a relatively isolated and quiet section of the room, providing a library table and chairs and low, open bookshelves suitable for large format books. Comfortable chairs or a unique reading area are also important.

Music Center is for experiences such as group singing and music listening. The music center may include a small piano and record player.

Teacher's Center should provide a desk and chair for the teacher, chairs for visitors, files for pupils' records and teaching materials, and closet storage for teacher's wraps and other materials.

Dramatics Center, for simple dramatizations, may be provided by a portable platform or by using space in the library or music center.

Milk Bar or Kitchenette (desirable if pupils are bussed) may provide a hot plate, with storage suitable to the school milk, snack or lunch program.

The Design and Specification of a Kindergarten Facility

The Classroom

The design of the classroom should proceed with the major desired learning outcomes in mind as described previously. These include: development of the basic skills in meaningful situations, and promotion of physical, social and emotional growth of the child. Be sure the room is designed for kindergarten students rather than adults or older children.

1. This area should be planned to contain approximately 50 square feet per child, which includes storage, toilet space and drinking fountains.
2. The ceiling height should be 8½ to 9 feet high.
3. Chalkboard should be 8-12 feet long with the lower edge not more than 24" from the floor. If the chalkboard is to be slate, choose first quality, natural slate, not dyed.
4. Display. Provide ample tackboard and some pegboard as room design permits. (Lower edge should not be more than 24" from the floor.)
   At least one tackboard should be low enough so the children can use it.
   Ample hooks and clamps for charts and pictures should be placed at the top moulding of the chalkboards and tackboards. Recessed picture moulding may be used on all walls.
5. Clocks. An electric clock that has an extra large face, numbers and hands should be provided.
6. Outlets. Duplex electrical outlets should be situated to allow the use of radios, record players and visual aids.
   One outlet should be provided over the work counter, but at some distance from the sink.
7. Screen. Provide a roll-up projection screen on one wall.
8. Pupil materials storage: individual cubicles, sized for intended use, often 12" x 20" x 15". Some schools prefer good storage for pupil materials placed in several parts of the room.

Other Considerations:

1. Toilet, laboratory and fountain facilities
   a. Toilet. A room with a standard size toilet (15" to rim). The trend is toward a room for boys and a room for girls. Some schools prefer a junior size water closet (13" to rim).
   b. Lavatory. A lavatory (24" floor to rim) should be outside the toilet room, adjacent to the entrance for easy supervision of handwashing by the teacher.
   c. Fountain. A drinking fountain (26" floor to rim) should be in the classroom. An electrically cooled fountain might be considered
2. Clothing storage alcove
   This should be convenient to the outside entrance with open racks or compartments, an upper shelf for hats, clothes rods or hangers for coats (variable height floor to center: 36"-40"), and a lower shelf for boots and overshoes. Some schools prefer movable clothing storage units with cork or tackboard behind, or open racks and shelves in classroom near the exit, closed off by doors or screens. In every case, there is a need for teacher control of this area.
3. Storeroom
   a. One for bulky types of indoor equipment such as construction blocks, cots or mats, looms, easels, supplies.
   b. One convenient to play area entrance for outdoor wheeled toys, building blocks, sand toys, garden tools.
4. Mobility
   Movable bins, shelves and equipment will encourage flexibility in the classroom. The teacher can arrange the room to suit himself/herself and the pupils.
5. Decoration
   A desirable visual environment is enhanced by the skillful use of color.
6. Floors
   Durable, resilient material, capable of standing up to continuous physical activities of kindergarten children and rearrangement of furniture and movable equipment.
   Carpeting is very desirable as the floors are used a great deal.
7. Other Considerations
   Lighting, heating and ventilation are important considerations. The need for warm floors suggests the use of radiant heating for the room and planners might consider installing it in the floors.

Outdoor Learning: Activity, Play Area

Set this area aside from the rest of the school playground in a sunny spot sheltered from the wind with a hard surface (such as blacktop) in part of it. The outside activity area deserves as much attention and planning as the inside classroom since large muscle activity, fresh air and sunshine are essential components of the child's day. This area should be thought of as an extension of the inside activity area.

Equipment, Toys and Materials

1. Equipment and toys should be selected to provide for running, climbing, pushing, pulling, lifting, stretching, throwing, catching, digging and pouring.
2. The outside play area should be fenced to keep young children in and unwanted visitors out.
3. Barrels, ladders, large wooden boxes, planks and cardboard cartons can become airplanes, secret hiding places or rockets and spaceships.
4. A tree stump for pounding nails, a culvert to crawl through, an abandoned rowboat for dramatic play, a smooth log for climbing and balancing – all can well be included in a school's outdoor area for young children.
5. Sand and grass make good outdoor ground surfaces.
6. A blacktopped area serves well for riding large wheel toys.
7. A small plot of ground for digging and planting, an area for sand to be sifted and molded, an outside source of water, a ramp for sliding, sheds for storage and a covered area for outside play on mild rainy days make the outside space more usable and interesting to young children.

Let Imagination Rule Outside Activity Lay-Out.

There is no end to ideas for really creative outdoor space for children. It represents a large investment, but a good one in view of the major contribution this activity makes to the development of the child in the early years.

"When the setting—the physical facilities and equipment—are safe, interesting, and appropriately planned for preschool children and for the adults who are concerned about them, a solid foundation can be laid for the nursery school to become an important first step in education." (Taken from *A First Step in Education . . . Nursery School*, by Dorothy Lane, et. al. State of Iowa, Department of Public Instruction, 1968.)

The Health Program

By: Fay S. Cleary
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The health program has three major interdependent components: healthful environment, health education and health services. The health program is based on adequate, relevant policies established by the governing board of the agency or institution providing the educational program. The administration has the responsibility for providing *facilities*, *materials* and *qualified personnel* to implement these policies.

The term 'healthful environment' means a school which provides an esthetically pleasing physical setting where children can feel safe and secure and free to express their feelings in a socially acceptable manner. The selection of equipment for each classroom is influenced by the size of the children (height and weight), their physical ability (motor skills) and the activities in the educational program. The available floor space in each classroom will have some effect on the selection of these activities. Classroom activities ranging from paper work at tables to using projectors require lighting controls which provide a wide range of intensity without glare. The healthful environment also includes ready access to drinking fountains, toilets and handwashing facilities with soap, warm water and towels. It is necessary to provide for ready evacuation of children from the classroom to a safe, secure place in case of fire or severe weather. It is essential that these evacuation procedures be practiced until each child is familiar and reasonably comfortable in these situations.

Healthful environment includes the emotional atmosphere of the school. An adequate learning atmosphere is a safe place where each child is a person of worth regardless of the child's uniqueness. Generally, children are openly honest with observations of differences among themselves. If such candor is accepted, the children acknowledge these differences without attaching status or stigma.

Health education assists children in understanding their own growth and development, their limitations, their feelings, wellness promotion and disease prevention. Often elements of health education are integrated into other subject areas. This integration assists in blending knowledge and behaviors into daily living patterns.

Health services denote those activities which:

1. Assess the health status of the school population
2. Coordinate activities to promote wellness
3. Identify health problems
4. Assist in obtaining care and treatment for children with health problems
5. Assist in accomodating children with health problems in the classroom
6. Coordinate care of the ill or injured child during school

Preparation for Kindergarten Enrollment

The child expecting to enroll in kindergarten should be prepared for this major step physically, socially and emotionally. Physical preparation for school entry requires medical assessment of the child to establish a base in the child's health status. The report of the medical evaluation is the beginning of the child's cumulative health record. This health record should accompany the child throughout the school years.

Since January 1978, all children entering school must present a certificate of their immunization status. There are three types of immunization certificates.

1. Certificate of Immunization
   Issued to children who have the required immunizations
2. Certificate of Immunization Exemption
   Issued to children who have medical or religious exemptions

3. Provisional Certificate of Immunization
   Issued to children who have begun, but not completed, the required immunizations. This certificate expires in 120 days after issuance.

The required immunizations are those required by statute.

The recommended immunizations are those recommended by the American Academy of Pediatrics or the National Center for Disease Control. Often children will be immunized against mumps. This is an example of recommended immunization. Currently, mumps immunization is not required for school attendance.

All immunization certificates are kept in files separate from the school records. The Department of Health audits the immunization certificates each fall.

Medications

In preparation for the days at school, children should become comfortable with a scheduled eating time similar to the schedule maintained during the school year. Most children seem to fare better in the classroom if they have eaten shortly before arriving at school.

The amount of sleep required varies among individuals. Kindergarteners usually require nine to ten hours nightly. The child's bedtime should be early enough to cause spontaneous awakening in time for school. Afternoon kindergarten children also need an early bedtime. After the morning activities, a period of quiet play before lunch will help the child through the afternoon class with less fatigue.

Children entering kindergarten are capable and should be taught to dress themselves completely. This includes tying shoe laces, buttoning, zipping, [illegible] on outdoor clothing and boots. Handicapped children may not be able to do all these but are capable of some.

Name tags on coats, boots, caps and mittens may eliminate replacement of lost articles during the school year. Not all schools have facilities for keeping each child's outdoor clothes entirely separated. Often schools request the family to provide small rugs to be used for rest time. These should be marked with the child's name.

Entering school means separation from home and family plus coping with a room of children. Children need to be eased into separation from family. Arrangements should be made for children to spend time away from family and out of their homes for gradually extended times. Then, separation from family is no longer a threat to the child.

By school age, children are expected to know their parents full name, home address, telephone number and place of employment. Occasionally, children become ill or injured during school. Schools are expected to provide first aid until the parents can take over the care. It is essential that the school be provided the following information about each child.

1. Parents legal name, address, telephone number
2. Name, address and telephone number of parents' employers
3. Hospital and physicians who may be called in an emergency at parents' expense
4. Alternative person(s) who will assume responsibility for child in parents' absence

It is essential the child also know the legal name of the alternative person(s).

Entering school is viewed by parents as a new and exciting experience for their first child. Efforts to maintain the same attitudes for succeeding children often

have to be consciously made. Assisting the child to develop realistic expectations of school will enhance the child's experience. There will be times when individual children will not be able to do as they please. Experiencing some delay in having one's desires met can be very difficult if it is a new experience for the child.

Teachers must depend on verbal control to manage groups of children. Kindergarten classrooms can have many more activities when the children are able to comply with verbal directions. The child used to following directions will have a more pleasant experience.

The child walking to school needs to establish a safe and direct route which is consistently followed. Parents then know when to expect the child to arrive home, or can meet the child on the way home if desired.

The Kindergarten Child

The kindergarten teacher tries to make school a pleasant and interesting experience for each child. Knowledge of the health and developmental history of each child assists the teacher in planning the most effective educational experiences for the children. Health history encompasses the child's physical, social and mental well-being. Factors in these areas assist the teacher in understanding the child's behavior and developing realistic expectations of the child's educational progress.

From the medical report, health and developmental history, significant information about the child's state of health and all medications taken must be provided in writing to the kindergarten teacher for ready access in case of emergency. All medications dispensed in school need to have a prescription on file in the school and written parental consent before the child is given any medication. This applies to all drugs including aspirin and cough syrup. Prescriptions for medication include name of medication, the child's name, the time and amount of medication to be given during school. This data is kept on each child's health record and in the cumulative folder. If these records are not in the classroom, a copy of them should be provided the child's teacher.

It is essential that the teacher be aware of health conditions such as diabetes, seizures and allergies and the school's responsibility for providing adequate emergency care. The teacher must also know of social or emotional concerns parents have about their children.

Every teacher should have pertinent information on each child in the classroom in case of an emergency. The information may be on a card or in a notebook and needs to include: the child's name; parent or guardian's name; home address and phone number; mother and father's employers, addresses and phone numbers; medications taken during school and at what times; and any health problems.

As soon as possible teachers try to establish the child's usual behavior patterns. Often it is impossible to tell if the early subtle changes in behavior come from physical, social or emotional stress. But these changes are clues for continued and closer observation or exploration.

Unless the child has older siblings or has been in groups of children, there is little immunity from the many minor illnesses common in the school population. Feeling the child's body temperature by placing one's hand on the back between the shoulder blades will give a more accurate assessment of the child's temperature than the forehead.

Some children flush with temperature elevation while others seem to become pale. A change in the appearance of the child's eyes may be the first detectable clue to developing problems. A child with a running nose or one who suddenly begins sniffing may have an allergic reaction or may be developing a cold.

One observation teachers must record are bruise marks, their size, color and location on the body and the child's explanation of how they occurred. Some children acquire many bruises in their play and some are acquired from abusive handling by adults. When discussing these events with the child, the teacher should explore how the injury could be avoided.

It is necessary for teachers to establish classroom routine for toileting. Most children enter school with an established pattern of using the toilet as desired. Since children vary in their capacities, it is necessary to allow them to use the toilet on request. This should be granted with as little disruption of activities as possible. If a child seems to be going more frequently than others, recording the time of the trips to the toilet is essential. This frequency may signify developing urinary infection or mere anxiety. Discussion with the child should take place upon return, not before granting permission to go. A check on fluid intake may reveal the cause.

When there is a nourishment break in the school day, children should not be pressured into taking all of the serving. Encouraging food injestion when the child isn't hungry helps establish the pattern of overeating.

Children do become ill during the school day. It is necessary for the school to have an established criteria for exclusion of ill children. This criteria should be in writing and provided to all parents. The prerequisites for returning to school following illness should be in writing and given to parents. While regular attendance is to be encouraged, children who are ill do not belong in school and are to be sent home as quickly as possible. Children who appear tired, listless and have dull looking eyes should be sent to the school nurse for evaluation.

The physical development of children has a general pattern of large muscle to fine muscle and from head to foot. Individual children follow this general trend with spurts of growth, sometimes a bit of regression and always plateaus. Emotional, psychological or physical stress will affect these patterns. It is often difficult to identify the cause of deviations in a child's growth pattern and differentiate between variations within the outer range of normal and early signs of pending problems.

Children may react visibly to emotional stress in the home. At kindergarten age, children are already aware which of these situations can be discussed outside the home. Continued evaluation and monitoring by school support personnel is indicated in these situations.

When the kindergarten teacher is aware of each child's health status and parents' concerns about their children, the teacher is able to develop an enjoyable learning experience for the class.

Children with Special Needs

By:

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All children go through different stages as they grow and develop. These stages which start before birth and continue through adulthood are repeated and require varying amounts of time. Gesell emphasizes the importance of giving children the gift of time and experiences to develop. However, children who are developmentally several years behind the majority of children of the same chronological age and children with physical handicaps will benefit from early intervention and special programming.

With the implementation of recent legislation, special education programs and services are now available to any child from birth through age 21. For the child below kindergarten entry age, such services may include: home intervention, speech services, physical therapy, and classes for the preschool handicapped child. Due to availability of services, many students, who in the past would have entered kindergarten without receiving special services, will now receive needed intervention prior to kindergarten entrance.

Some early identified handicapped students will require continued maintenance in special education instructional programs. Other handicapped students will enter kindergarten with instructional and support services being supplementary to the regular kindergarten program. Still others will be able to enter the kindergarten program with no need for special education programs or services.

Even though special education programs and services are available at the preschool level, some students will not be identified until the kindergarten program proves to be difficult for them. It is important to remember that a child-centered readiness program should strive to match the program to the child rather than to expect the child to fit into a set program. However, when a child appears to have extraordinary problems over a period of time, it may be necessary to refer that student for diagnostic evaluations. Such evaluations could result in a wide variety of recommendations and/or special placements.

If you have a child you suspect may need a special program or special assistance, it is necessary to take some preliminary actions to ascertain the scope and permanence of the problem. These should include:

1. Systematic classroom observation of the child's performance and the related environmental conditions.
2. A preliminary conference with the parents to discuss the areas of concern, gain insight into the functioning level of the child within the home and community environment, and if appropriate, the assistance of the parent in helping the child deal with the problem.

Observation

When you begin the data collection process, you will be looking for patterns of behavior or problems. This identification process can be facilitated by using the information that you collect every day when working with your class.

One place to look is the *attendance records*. A child cannot be expected to learn well if many days of school have been missed. The reason for consistent absences might be a clue to a problem. Are illnesses recurring and should they be evaluated more closely? What if the child isn't attending school because he/she doesn't want to? This can be an indication of an attitude problem in the home initiated by the parent and/or the child.

Notes from the observations made in the classroom are another source from which problems can be identified. Direct observation of child behavior provides data that reflects actual occurrence of behavior in a part of the natural environment. This information can be collected by the teacher as the child performs a variety of tasks under conditions in which the child is typically expected to perform. This information should be collected without interruption of regular classroom activities.

When observing a child, be sure to separate the ability to react from the opportunity to react. Note any distracting stimuli that might interfere with the child's performance; document any attempts to assist and the result of those attempts.

Teacher-collected data should not be used to diagnose a specific handicap, but should be used to communicate to other professionals and to parents the need and concern for further diagnostic information. Any specific diagnosis will come from a staffing team after referral and evaluation.

Remember, as you look at the child, that each child in your class may show a deficit in one or more areas, but is able to compensate in such a way that there is not interference with the educational process. If however, the child is experiencing difficulty coping with certain areas of the educational program, these problem areas may present clues as to the source of the child's difficulty. As you observe the child, record those aspects that are noticeably different from normal functioning patterns of kindergarten children.

The following areas should especially be noted when assessing general functioning of the child:

1. **Hearing**: Does the child turn his/her head toward you when his her name is called softly or does the child react strangely to a sudden, loud noise? During music or story time, is the child unable to pay attention or does he/she disrupt the class? Is the child's articulation or speech pattern poor? Does the child watch the speaker's face closely when being spoken to, perhaps getting the information from facial expressions and gesture rather than from what is said? Does the child seem to be extremely overactive and easily distracted? May you notice that the child pulls, tugs or digs at an ear and frequently tells you his her ears hurt. You might also notice that the child says "huh" a lot. These are some possible indications of a hearing problem.

2. **Social-emotional**: In this area look for behaviors that characteristically occur day after day or week after week. Does the child resist separation from parents, cling excessively to adults, or shy away from unfamiliar adults? Is an excessive number of attention-getting behaviors used by the child to manipulate adults, e.g., tantrums, lavish displays of affection, or using a nearly inaudible voice level? Is solitary or parallel play the only type of play the child engages in or does the child avoid certain children or latch on to one child almost exclusively? Does the child disrupt other children's play or constantly flit from one group to another, seldom staying in one group for any length of time? Can the child assume necessary responsibility for self-management, i.e., feeding, toileting, dressing, or putting away toys and materials? Is the child able to direct him/herself into purposeful activity when left to own devices? Does the child refuse to enter new situations, explore new materials, or appear overly frightened by unsuspected stimuli? Is the child able to cope with varied situations or solve problems when necessary? Any of these "signs" must be pointing out a delay or difficulty in social emotional development.

3. **Gross motor**: What does the child do? Is the child physically active? Does the child run, jump, use climbing equipment? Can the child ride a tricycle? Notice if the child participates in music and rhythm exercises. A deficit in any of these areas could be indicative of a problem in gross motor development.

4. Fine motor How does the child handle a pencil, crayon or brush? Does the child scribble randomly or draw with no apparent purpose or control? Does the child drink from a cup and/or a straw, handle eating tools, dress him/herself? Can the child manipulate pegs, puzzles, blocks and similar materials competently? Lack of these behaviors should be observed and noted as possible indications of a fine motor delay.

5. Vision: Watch the child while he/she does visual tasks. Does the child look directly with open eyes at what is being done or does the child tilt his/her head to look at angles, close one eye or squint? Does the child often bump into things or fall on the playground? Is there an unusual appearance to the eyes, i.e., bloodshot, tearing when doing close work, a turning in or out, or frequent sties or crusty residue? These or any other unusual actions may indicate a problem.

Further information on disability signals and suggestions for collection of information follows the referral section. These are not all-inclusive, but are designed to give you a feel for the kind of information that can be collected.

Referral

Referral is the process of requesting an in-depth evaluation of a student having difficulty with the regular school program. Referral can be initiated by parents, teachers, counselors, school nurse, principals or others having direct contact with students who may be in need of special educational services.

Within an individual building, the referral initially would go to the principal. Specific forms for this process are available from all AEA's. If a conference of building level personnel and parents has not been held to discuss the problem, such a conference should be held before the referral is acted upon. If this conference has already resulted in demonstration of need for further assistance, the principal, teacher or AEA representative will need to obtain the parent's consent to evaluate the student.

Following the evaluation, a staffing may be held to discuss the appropriate education programs and/or services needed to best meet the student's educational needs. The staffing team may determine that one or several education programs or service options are appropriate and available for the student.

The staffing team is typically composed of persons on staff of the local school district, parents, AEA personnel, and other support agencies which are involved and/or could enhance the student's total program.

Disability Area	Indicators of Possible Problems	Recommendations for Collection of Referral Information
Communication (Language, Articulation, Voice or Fluency) *	Child may: - have communication quite different from children of similar age - have an anomaly of anatomy or physiology of the "speech mechanism" - be unintelligible or difficult to understand - have inappropriate oral language - be excessively quiet - have related problems such as cerebral palsy, cleft palate, lip, hearing loss, mental retardation, emotional disability, learning disability, or some physical or organic disability - exhibit responses that are drawn out due to the need to search for a word - stutter be silent or not respond to questions much of the time - seem slow to understand or learn in certain situations - be hesitant to approach other children - have a hearing problem - have a voice quality which is not appropriate for age and sex	1. What specifically is it that you have heard or observed which makes you suspect a communication disability? 2. How frequently is the behavior observed? 3. How does the behavior interfere with school performance? 4. Has the child had a hearing examination? 5. Since listening implies attention, when the complaint is "_____ doesn't listen to directions", observe and record data on: a. Length of attending behavior b. Distracting objects and actions in the environment

* NOTE: Chapter 257.25(2) of the *Code of Iowa* requires "experiences designed to develop . . . growth in the language arts and communication skills" as a part of the kindergarten program. Many speech clinicians can provide help to teachers in developing curriculum content which helps the development of communication skills.

Disability Area	Indicators of Possible Problems	Recommendations for Collection of Referral Information
Hearing	Child may: - say "huh"? or "what"? frequently - dig or pull at ears - tell you that his/her ears hurt - not pay attention - not have speech and language abilities appropriate to age level - have a behavior problem - have trouble locating source of sound - not interact well with other children - delay in answering you - respond to speech only when facing the speaker	1. What specifically is it that you have observed which makes you suspect a hearing disability? 2. How frequently is the behavior observed? 3. How does the behavior interfere with school performance? 4. Has the child had a hearing examination? 5. Has the child had a medical examination?
Learning *	Child may: - not be able to recognize a known object when moved to another position - may not be able to match objects to shape - may not remember designs he/she has seen - may not be able to identify differences between two like, but not identical, pictures or objects - be clumsy and awkward in movement - may not join in games because he/she can't throw, catch or hit a ball - perseverate (make a continuous repetition of the same motor movement without changing the pattern) - exhibit excessive motor activity, which appears to be unresponsive to usual behavior control - have trouble gripping a pencil correctly - copy geometric forms - complete common drawings - have an inability to switch from one activity to another	1. What specifically is it that you have observed which makes you suspect a learning disability? 2. How frequently is the behavior observed? 3. How does the behavior interfere with school performance? 4. Has the child had a hearing and vision examination? 5. Has the child had a medical examination?

* Many children in your class will probably exhibit, at one time or another, some of the behaviors listed here. However, this does not necessarily mean they have a learning disability. The critical factor in making an appropriate referral is whether the behaviors are consistently displayed over time and whether the behaviors are hindering the child's readiness for first grade activities.

Disability Area	Indicators of Possible Problems	Recommendations for Collection of Referral Information
Mental	Child may: · exhibit an overall delay in development of age-appropriate behavior including: motor (walking, sitting, hopping, running) social-emotional (judgment concerning safety, poor use of toys, inability to travel independently, flexibility in novel situations) academic (noticeable problems in letter and word recognition, and development of numeric concepts)	1. What specifically is it that you have observed which makes you suspect a mental disability? 2. How does the behavior interfere with school performance? 3. Has the child had a vision and hearing examination? 4. Has the child had a medical examination?
Visual	Child may: · exhibit uncertain movement in familiar surroundings · experience a number of minor accidents · appear clumsy · perform poorly on written tasks (paper and pencil)	1. What specifically is it that you have observed which makes you suspect a visual disability? 2. How frequently is the behavior observed? 3. How does this behavior interfere with school performance? 4. Has the child had a vision examination?

Legal Foundation

Kindergarten education in Iowa is elective rather than mandatory. However, each of Iowa's public school districts provides a kindergarten program funded through the school foundation plan.

Legal reference regarding kindergarten may be found in the *Iowa Administrative Code* [670] (better known to educators as the *School Rules of Iowa*) and the *Code of Iowa: Educational Standards*.

From the *Iowa Administrative Code*

[670] Department of Public Instruction

3.2 Definitions (Educational Standards)

3.2(2) *Kindergarten.* A kindergarten program is hereby defined as a program which provides educational activities especially planned for developing the potentialities of children of school age who are past prekindergarten age but who have not been enrolled in grade one.

3.5(3) *Educational program—form and content.* The educational program, as adopted by each board, shall set forth the administrative measures and the sequence of learning situations through which attempts are made to provide pupils with well-articulated developmental learning experiences from the date of school entrance until high school graduation.

3.5(4) *Educational program—description and filing.* The board shall require its administrators and professional staff to develop and furnish a description of the total prekindergarten, if offered, through grade twelve educational program that the board is willing to approve. This description, after having been adopted by the board, and all subsequent revisions thereof, shall be filed locally in a readily available form and location as evidence of compliance with the provision of the law.

The description of the prekindergarten school educational program, if offered, elementary school educational program, middle school educational program, junior high school educational program, and the high school educational program shall be in sequential order and shall explain the manner which pupils are served in each of the areas of instruction as specified in chapters 257, 280, 321 of the *Code.*

3.5(5) *Instructional guide for each subject.* Classroom instruction in each subject taught in the schools shall be based on careful planning. The board shall require that a resource guide be developed for each instructional sequence and it shall include a statement of its educational purposes; suggested instructional activities, materials, and content; and a description of the performance criteria useful in evaluating each pupil's progress during the educational sequence.

3.5(11) *Organization of daily and weekly schedules.* Daily and weekly schedules shall be organized by school officials in a manner which, in their judgment, best fits the conditions within their schools.

3.5(16) *Kindergarten Program.* Each board that operates a kindergarten shall require its professional staff to develop, subject to official adoption by said board, an educational program that meets the conditions for kindergarten activities as specified in chapter 257, *Code of Iowa.* This program and all subsequent revisions thereof, when adopted by the board, shall be recorded in its minutes.

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Certification

Any person holding an Iowa certificate endorsed for elementary school teaching and who holds a bachelor's degree for teaching in the elementary school and who is so recommended by his/her preparing teacher education program is eligible to teach the kindergarten age child.

Certification through the teacher education and certification division of the Department of Public Instruction is basically upon the recommendation of the teacher education divisions of the institutions preparing teachers. These programs vary somewhat, but are all approved by the Department of Public Instruction and upon recommendation of the respective institutions, certificates are granted.

15.2(257) *Prekindergarten—kindergarten teacher.* For authorization to serve as teacher in prekindergarten and kindergarten, the applicant shall possess a bachelor's degree and have completed an approved program of study for the preparation of prekindergarten-kindergarten teachers, which program may be either included in, or in addition to, the work leading to said degree.

15.3(257) *Elementary Teacher.* For authorization to teach in kindergarten and grades one through nine, the applicant shall have completed an approved four-year elementary teacher education program, including supervised student teaching at the elementary level, and a bachelor's degree from a recognized institution.

From the *Code of Iowa: Educational Standards*

257.25(2) *Kindergarten level.* If a school offers a kindergarten program, the program shall include experiences designed to develop healthy emotional and social habits and growth in the language arts and communication skills, as well as a capacity for the completion of individual tasks, and protection and development of physical being. A kindergarten teacher shall hold a certificate certifying that the holder is qualified to teach in kindergarten.

Admission of Children:

282.3(1) The board may exclude from school children under the age of six years when, in its judgment, such children are not sufficiently mature to be benefited by regular instruction, or any incorrigible child or any child who in its judgment is so abnormal that regular instruction would be of no substantial benefit to him, or any child whose presence in school may be injurious to the health or morals of other pupils or to the welfare of such school. However, the board shall provide special education programs and services under the provisions of chapters 273, 281, and 442 for all children requiring special education.

282.3(2) No child shall be admitted to school work for the year immediately preceding the first grade unless he is five years of age on or before the fifteenth of September of the current school year.

No child shall be admitted to the first grade unless he is six years of age on or before the fifteenth of September of the current school year, except that a child under six years of age who has been admitted to school work for the year immediately preceding the first grade under conditions approved by the Department of Public Instruction, or who has demonstrated the possession of sufficient ability to profit by first grade work on the basis of tests or other means of evaluation recommended or approved by the Department of Public Instruction, may be admitted to first grade at any time before December 31.

282.3(3) Nothing herein provided shall prohibit a school board from requiring the attainment of a greater age than the age requirements herein set forth.

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Evaluating the Kindergarten Program

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It is often thought that changes in a kindergarten program occur when new materials are adopted or a different organizational pattern is implemented. However, even after new materials are chosen and new techniques employed, the following questions still arise: "Is our kindergarten program as good as it should be?" "How can we change our program so that it best meets our needs?"

The question that should be asked is: "Can a school have the best possible kindergarten program until it determines the strengths and weaknesses of its current program?" Each kindergarten teacher and administrator has individual impressions regarding the effectiveness of the kindergarten program and how it can be improved. Therefore, it is necessary to delineate a staff's perception of its program.

The kindergarten advisory committee believes that:

- Kindergarten programs should be planned after involving appropriate personnel in assessing what the program is now.
- Standards of exemplary programs should be examined.
- The school staff and community should determine what they want the program to be.
- The alternatives to achieve the desired program should be defined.

This profile of a kindergarten program is designed to be used by teachers and administrators in determining what the program is NOW. The components include:

- Administration and Organization
- Assessment
- Instruction
- Instructional Materials
- Staff and Staff Development

This "Profile" may be viewed as an instrument which provides a v[illegible] for discussing curriculum needs. It can be used in program planning, in the revis[illegible]n or expansion of the present program.

Profile of a Kindergarten Program

1. Administration and Organization

A. There is a carefully planned, clearly defined kindergarten curriculum for all students.

B. There is a continuous progress organization of the kindergarten curriculum.

C. There are identifiable goals and learning outcomes.

D. There is an appropriate teacher-pupil ratio (16-24).

E. There is a plan for kindergarten orientation and registration which includes legal requirements and screening procedures.

F. There are classes *every* school day.

G. There are plans and procedures for emergency situations.

H. There is an ongoing program evaluation process.

I. There is planned continuity between the kindergarten and first grade to insure uninterrupted progress for children.

J. There is a philosophy that considers kindergarten to be an integral part of the total educational program.

K. There are adequate facilities adjusted to fit the educational program and the children's needs.

2. Assessment

A. There is a comprehensive ongoing needs assessment of students' social, emotional, physical and intellectual abilities.

B. There is a plan to systematically observe children and seek specialized assistance as appropriate.

C. There are educational records, which are easily accessible, systematically kept for each child.

D. There is data and assessment information considered as each child progresses to the next level.

E. There is regular evaluation and modification (if necessary) of the kindergarten program.

Profile of a Kindergarten Program

3. Instruction

A. There is a warm, positive environment in the school which reflects commitment to the importance and enjoyment of learning and living.

B. There are accommodations in programming which consider the immediate environment of the children.

C. There is organized instruction based on goals and activities to provide for individual differences.

D. There is a balance of large group, small group, and individual activities to accommodate the varying rates of learning and special needs, interests and problems of all students.

E. There is a balance of active and passive activities.

F. There are differentiated modes of instruction with children being grouped and regrouped flexibly.

G. There is recognition of and accommodation for cultural and sexual differences.

H. There is a developmental sequence of skills to be taught.

I. There are provisions which help children cope with feelings.

J. There is systematic communication and involvement with parents.

4. Instructional Materials

A. There are adequate, varied and appropriate materials for individualized progress.

B. There are hands-on manipulative materials in all areas of the curriculum.

C. There are materials free of cultural and sexual bias.

D. There are procedures to select materials following, not preceding, curriculum development.

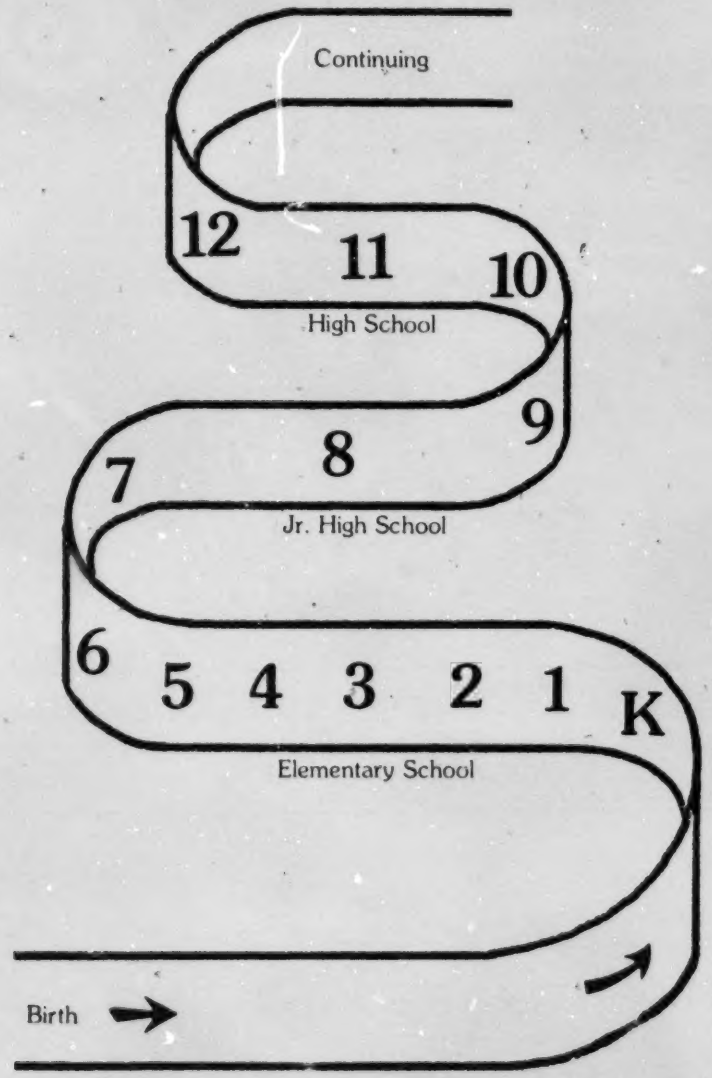
E. There is adequate storage for materials.

5. Staff and Staff Development

A. There is a policy of selecting highly qualified teachers for kindergarten.

B. There is an ongoing program of staff development.

Learning Is a Continuum: The Next Step



Each child is unique and learns at his or her own pace. Our responsibility as educators is to provide appropriate programs to meet each child's differing abilities, needs and interests.

The Next Step:

1. Determine where the child is at the end of the kindergarten year.
2. Communicate with the receiving teacher.
3. Provide complete records.
4. Plan a program for next year based on specific information about each child.

The child's progress will be continuous, based on ability and achievement rather than grade level.

"A child is a lamp to be lighted — not a vessel to be filled."
(Anon)

Resources & Information

Organizations:

Association for Childhood Education International (ACEI), 3615 Wisconsin Ave., Northwest, Washington, D.C. 20016

Child Study Association of America (CSAA), 9 East 89th St., New York, N.Y. 10028

Child Welfare League of America, Inc. (CWLA), 67 Irving Place, New York, N.Y. 10003

Day Care and Child Development Council of America, Inc., 1012 14th St., Northwest, Washington, D.C. 20005

American Association of Elementary-Kindergarten-Nursery Educators (Newly Reorganized EKNE), 1201 16th St., Northwest, Washington, D.C. 20036

Educational Resources Information Center/Early Childhood Education (ERIC/ECE), 805 West Pennsylvania Ave., Urbana, Ill. 61801

National Association for the Education of Young Children (NAEYC), Editorial and Publications Department, 1834 Connecticut Ave., Northwest, Washington, D.C. 20009

Office of Education, U.S. Department of Health, Education and Welfare, Washington, D.C. 20202

Newsletters:

ERIC/ECE Newsletter, 805 West Pennsylvania Ave., Urbana, Ill. 61801

Report on Preschool Education, Capitol Publications, Inc., Suite G-12, 2430 Pennsylvania, Northwest, Washington, D.C. 20037

Today's Child, School Lane, Roosevelt, N.J. 08555

Journals:

Childhood Education, ACEI, 3615 Wisconsin Ave., Northwest, Washington, D.C. 20016

Children Today, DHEW, Welfare Administration, Children's Bureau, Third and Independence Ave., Southwest, Washington, D.C. 20201

Day Care and Early Education, Human Sciences Press, 72 Fifth Ave., New York, N.Y. 10011

Elementary School Journal, University of Chicago Press, 11030 Langley Ave., Chicago, Ill. 60628

Young Children, NAEYC, 1834 Connecticut Ave., Northwest, Washington, D.C. 20009